

SMOKE SIGNALS

For Radio Amateurs • By Radio Amateurs

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"Wire" You Doing That, Bob?

Bob McGinnis, KB9AP, happily anchors the end of a dipole being erected at the Field Day operating site of the Yellow Thunder Amateur Radio Club in western Columbia County, Wisconsin. Thousands of clubs and groups, both large and small, across the U.S. and Canada had frustration and fun in what is probably the most popular organized operating event every year. Field Day is an ARRL-sponsored event. More photos of Field Day clubs and groups enjoying their outing and operating are in this issue of Badger State Smoke Signals.

ARRL Moves on Three Washington Fronts in Protection of Amateur Radio Privileges

In a blizzard of comments to the Federal Communications Commission, the American Radio Relay League (ARRL) has:

- Supported, in principle, an FCC proposal to place the responsibility for the content of messages on their originator and their "first forwarder" in an amateur network;
- Opposed a proposal to allocate the frequency 449 MHz to future wind profiler radar systems; and
- Opposed a proposal to include yet another service, Automatic Vehicle Monitoring, in the 902-928 MHz band.

In all three cases, the League filed initial comments; reply comments will follow.

AMATEURS' RESPONSIBILITY FOR CONTENT OF MESSAGES

On July 1, 1993, the ARRL filed comments

with the FCC on their proposal to change the responsibility for the content of amateur messages relayed by the high-speed networks.

The FCC's proposal, in PR Docket 93-85, was in response to a number of petitions for rule making, and would establish "a compliance policy for amateur stations participating in automatic message forwarding systems, to hold the licensee of the station originating a message and the licensee of the first forwarding station primarily accountable for violative communications."

The petitions were filed following an incident in early 1991, when the operators of several amateur packet bulletin boards were cited by the Commission for forwarding what was characterized as a "commercial" message.

The proposal would modify current FCC rules, which provide accountability for each licensee for

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Relief Sought from Municipal Scanner Laws

The American Radio Relay League (ARRL) has asked the FCC's Private Radio Bureau (PRB) for help in relief from "scanner laws" which continue to plague Amateur Radio operators, and has provided to the FCC, at their request, recent examples of such laws and their effects.

The League, in a recent letter, told the PRB that it continues to address "serious legal problems of its members" resulting from municipal scanner ordinances, i.e., county and city ordinances which prohibit the possession and/or use within the jurisdiction of the municipality of radio receivers capable of reception of police or other public safety radio services.

The League said that because Amateur Radio transceivers are routinely capable of such reception as an incident of their design, amateurs are the unintended victims of these ordinances. Police often stop radio amateurs and cite them, or seize their equipment, based on these ordinances.

In February, 1991, the FCC issued a Notice of Inquiry on the subject, based on a League request for a declaratory ruling filed in November, 1989. Since then, all 50 state "scanner laws" have been modified to either exempt licensed amateurs or at least to prohibit not the possession of the device in a motor vehicle or otherwise, but rather to prohibit the use of them in the commission of a crime.

So, while the state statutes are no longer a problem, the League said, the ordinances are, both because they are often unknown to the travelling public and because they seek to punish perfectly innocent acts by FCC-licensed amateurs.

"Use of Amateur Radio in public service or emergency communications should not subject the licensee to violation of criminal or quasi-criminal ordinances and penalties, but that is what is occurring," the League said, citing examples in Chicago and elsewhere.

The League said that some municipal ordinances require payment of a fee to own and use a mobile Amateur Radio transceiver. "This is, in the opinion of the League, an unlawful exercise of the police power jurisdiction of the municipalities, as it

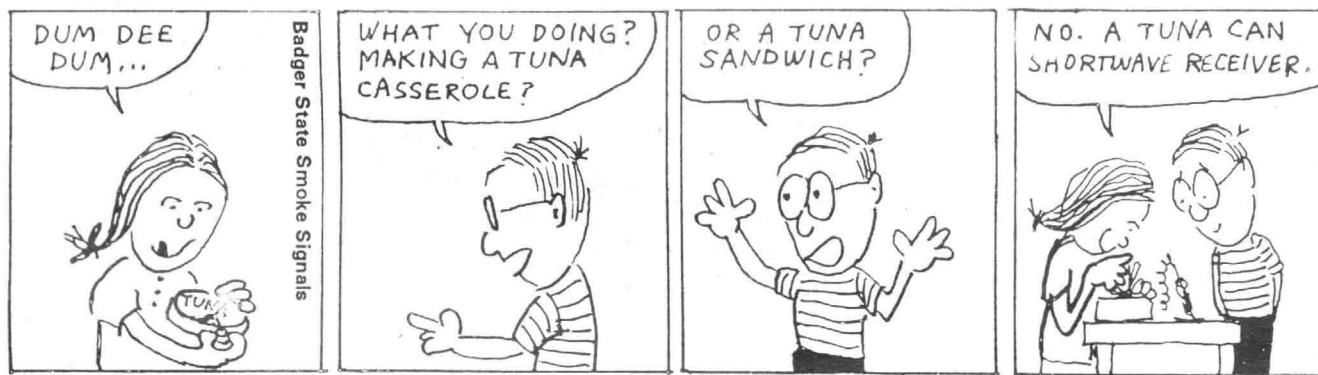
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ELMER

By Rich Regent, K9GDF



What's Happening

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Edited by Kenneth A. Ebnetter, K9EN • 822 Wauona Trail • Portage, WI 53901

Swapfests and Other Social Events

SATURDAY, AUGUST 14, 1993. Racine Hamfest, sponsored by Racine Megacycle Club and UW-Parkside Computer Club. Held at the South Hills Country Club 8:00 a.m. to 2:00 p.m. Admission \$3.00 and tables \$4.00. For table reservations contact RMC, P.O. Box 3, Racine WI 53401. For information contact Lloyd, WB9RGO (414) 639-2041, Dave, WB9USU (414) 554-7565 or Dave, AA9HL, (414) 681-3208.

SATURDAY, AUGUST 14, 1993. Swapfest sponsored by the Northwoods ARC, Rhinelander/Tomahawk Repeater Associations and ARES at Sugarcamp Town Hall, 12 miles north of Rhinelander on Highway 17. VE testing, concessions. Contact: Glen Woods, N9GRF, 6569 Hillcrest Drive, Rhinelander, WI 54501.

SATURDAY, AUGUST 28, 1993. Hobby Electronics Swapmeet, sponsored by the Riverland ARC. Held at the American Legion Activity Building, 731 Sand Lake Road, Onalaska, WI. Admission \$2.00, Tables \$3.00 (picnic type, first come basis.) Contact: Judy Williams, N9LGV, PO Box 621, Onalaska, WI 54650. (608) 783-8028.

SUNDAY, SEPTEMBER 12, 1993. Wisconsin Nets Association (WNA) Picnic. This year's picnic will be held at Derce Park, between Beaver Dam and Randolph, on county Highway CP off county highway G. Bring your grills. Come and have a good time. For more information inquire on one of the WNA nets.

SATURDAY & SUNDAY, SEPTEMBER 26 & 27. RADIO EXPO, Lake County, Fairgrounds, Grayslake, IL. Contact CFMC, PO Box 1532, Evanston, IL 60204.

SUNDAY, OCTOBER 10, 1993. Kettle Moraine Radio Amateurs at the Waukesha County Exposition

Center, Waukesha, WI. Contact: KMRA Swapfest, PO Box 411 Waukesha, WI 53187-0411.

SUNDAY, OCTOBER 10, 1993. KMRA Swapfest, Waukesha, WI. Contact: KMRA Swapfest, PO Box 411, Waukesha, WI 53187-0411.

SUNDAY, JANUARY 9, 1994. WARAC 22nd annual Midwinter Swapfest, Waukesha County Expo Center Forum, Waukesha, WI. Contact: WARAC Swapfest, PO Box 1072, Milwaukee, WI 53201-1072.

See also the back page and flyers ads for addition information about many of the above events.

As a service to our readers, this section of Badger State Smoke Signals is available without charge to list your upcoming Swapfest, Hamfest, dinner, picnic, party or other event of interest to Radio Amateurs in Wisconsin and nearby areas. Send information on your event to Kenneth A. Ebnetter, K9EN, 822 Wauona Trail, Portage, WI 53901. In addition, space is available at attractive rates on our advertising pages. For information on rates and requirements for our advertising pages, please contact K9ZZ or K9EN.

Club Meetings



Due to space limitations, we cannot always carry the full listing of Wisconsin and area club meetings. Please see the April 1993 meetings column for the latest complete listing. The following are additions or changes since that listing.

TAYLOR COUNTY AREA AMATEUR RADIO CLUB (TCAARC)
MEDFORD

Usually the 1st Thur. of the month at 7:00 PM sharp. Usual location: emergency government

meeting room, basement of Sheriff's Annex to Taylor County Courthouse, 2nd and Ogden Sts., Medford, WI. Talk-in on 147.75/15 or 145.27(-600) repeaters. Amateurs & guests are welcome. ARS Net, Wed. nights at 8:30 PM on 147.75/15. For info contact: Rolland Walty, W9LEE, W4117 Hwy. 102, Westboro, WI 54490. (715) 427-3492.

TRI-COUNTY AMATEUR RADIO CLUB

Meetings held at members homes. Usually monthly on Sunday afternoon. Contact: Glenn Eisenbrandt, (414) 563-6502 or John Saterlee, (414) 563-6381.

With the beginning of the fall activity season, we would like to carry a full listing of the Wisconsin area club meetings next month. Please check the above and the April full listing for any additions or corrections needed and send to Kenneth A. Ebnetter, K9EN, 822 Wauona Trail, Portage, WI 53901.

The Test Point



**Amateur Radio Examination Locations
and Schedules in the Wisconsin Area**

August 9, 1993	Appleton
August 14, 1994	Rhineland, WI (NWARC Swapfest)
August 14, 1994	River Falls, WI
August 14, 1993	Oak Creek, WI (SWAT)
August 18, 1993	West Allis, WI (MRAC)
August 21, 1993	Dubuque, IA
August 28, 1993	Wauwatosa, WI (MRAC)
August 28, 1993	Tomahawk, WI
September 4, 1993	Racine, WI
September 11, 1993	Madison, WI
September 11, 1993	Marshfield, WI
September 11, 1993	Oak Creek, WI (SWAT)
September 15, 1993	West Allis, WI (MRAC)
September 25, 1993	Wauwatosa, WI (MRAC)
September 25, 1993	Tomahawk, WI
October 2, 1993	Racine, WI
October 9, 1993	Oak Creek, WI (SWAT)
October 9, 1993	Madison, WI
October 9, 1993	River Falls, WI
October 10, 1994	Waukesha, WI (KMRA Swapfest)
October 20, 1993	West Allis, WI (MRAC)
October 30, 1993	Wauwatosa, WI (MRAC)
October 30, 1993	Tomahawk, WI
November 6, 1993	Racine, WI
November 6, 1993	Menomonie, WI
November 7, 1993	Kaukauna, WI (Hamfest)
November 13, 1993	Madison, WI
November 13, 1993	Marshfield, WI
November 13, 1993	Oak Creek, WI (SWAT)
November 17, 1993	West Allis, WI (MRAC)
November 20, 1993	Dubuque, IA
November 27, 1993	Wauwatosa, WI (MRAC)
December 1, 1993	Racine, WI
December 4, 1993	Stevens Point, WI
December 11, 1993	Madison, WI
December 11, 1993	River Falls, WI
December 11, 1993	Oak Creek, WI (SWAT)
December 15, 1993	West Allis, WI (MRAC)
January 9, 1994	Waukesha, WI (Midwinter Swapfest)

Monthly, 1st Sat. Racine, WI
(except January, July & August)
Monthly, 2nd Sat. Madison, WI
Monthly, 2nd Sat. Oak Creek, WI (SWAT/MRAC)
Monthly, 3rd Wed. West Allis, WI (MRAC)
Monthly, 3rd Sat. Loves Park, IL
Monthly, Last Sat. Wauwatosa, WI (MRAC)
(except December)
Monthly, Last Sat. Tomahawk, WI
(January thru October only)

Badger State Smoke Signals

**Amateur Radio
Education and Information**

CHAIRMAN: Kenneth A. Ebnetter, K9EN, 822 Wauona Trail, Portage, WI 53901. Telephone (608) 742-3560.

EDITOR: Jim Romelfanger, K9ZZ, 412 1/2 Ash Street, Baraboo, WI 53913. Telephone (608) 356-4031.

TREASURER: Jim Decker, WB9UQT, P.O. Box 337, Baraboo, WI 53913-0337.

CONTRIBUTING AUTHOR: Richard R. Regent, K9GDF, 5003 South 26th Street, Milwaukee, WI 53221.

Subscriptions

1 year	(12 issues)	\$9.75
2 years	(24 issues)	\$18.00
3 years	(36 issues)	\$26.00

Special club package reduced rates are available. For information, contact Ken Ebnetter, K9EN.

When to Send It

The closing date for each issue is the first of the month for the next month's issue. For example, the closing date for the June issue is May 1.

The only exception is for participating clubs. Participating clubs are requested to send their material no later than FIVE DAYS after the club's meeting. For example, if a club meets on the 4th of the month, the

material should be sent no later than the 9th of that month. This material is to be sent to the Editor.

Where to Send It

Address changes and corrections should be sent to Ken Ebnetter.

Editorial material, photographs, feature articles, display ads, and exchange papers should be sent to Jim Romelfanger.

Inquiries about advertising should be directed to Ken Ebnetter.

Swapfest information should be sent to Ken Ebnetter. Swapfest ads should be sent to Jim Romelfanger.

Subscriptions should be sent, with check or money order, to Jim Decker.

Conditions for Reprinting or BBS Posting Material from Badger State Smoke Signals

Permission is hereby granted to reprint articles or posting articles on radio or telephone bulletin boards from *Badger State Smoke Signals*, providing credit is given to the original author, publication in which the article first appeared, and to *Badger State Smoke Signals*. THIS CREDIT IS MANDATORY, AND NO MATERIAL MAY BE PRINTED OR POSTED UNLESS IT IS GIVEN. This newspaper is produced by volunteer Radio Amateurs, and is non-profit. This newspaper is mailed from Portage, WI 53901.

Editorial Disclaimer

The opinions expressed in editorials, guest editorials, columns, articles, and letters from readers are the opinions of the authors only, and do not, unless otherwise stated, express or imply endorsement by *Badger State Smoke Signals*, or by any other individual or organization.

Many Swapfests/Hamfests offer exam sessions. If not shown above contact the sponsoring club in the Swapfest column on page 2.

The FCC now requires applicants to show their ORIGINAL AMATEUR LICENSE to the VEC. A copy of your license must be attached to your FCC form 610. You will also be required to have a photo ID, or other acceptable identification.

GENERAL RULES

FOR MOST EXAMINATIONS:

Be sure to check with sponsors in the event there are changes and/or errors in the dates or information given.

Most examinations require filing an FCC Form 610 and advance registration at least 30 days before the exam date. (Some VECs permit walk-ins. Check with sponsor.)

To register, you must first secure a copy of the current FCC Form 610 and fill it out completely (AND CORRECTLY). Get your form from an FCC Field Office, the ARRL or Badger State Smoke Signals. Send a 29¢ SASE if you request one from the ARRL or BSSS. In most cases, forms can also be obtained from the sponsoring group.

ARRL/VEC examinations require a check for \$5.60 payable to "ARRL/VEC".

The FCC now requires applicants to show their ORIGINAL AMATEUR LICENSE or CSCE to the VEC. You must also have two good copies of your license or CSCE. A copy of your license or CSCE must be attached to your FCC form 610 and most VEC want a copy for their records. You will also be required to have a photo ID, or other acceptable identification.

Technician class licensees must show proof of testing before March 21, 1987, in order to upgrade to General with a code test only.

Additional information is given below.

MILWAUKEE RADIO AMATEURS' CLUB (MRAC/VEC) OAK CREEK, WI (SWAT-MRAC/VEC)

SECOND SATURDAY DATES: 1:00 p.m. at Wauwatosa Savings and Loan Branch, 6560 S. 27th St., Oak Creek, WI. (MRAC/VEC fee \$5.00)

THIRD WEDNESDAY DATES: At 6:30 p.m. at Park Manor, 3023 S 84th St., West Allis, WI.

LAST SATURDAY DATES (except December): 8:30 a.m. at Wauwatosa, WI.

For Additional Information Contact; Jack Krause, (414) 774-6999 or call (414) 466-HAMS (Answering Machine) or write MRAC, 1737 N. 116th St., Wauwatosa, WI 53226.

Bring along your ORIGINAL license or CSCE and two (2) good quality photocopies, plus two forms of identification, such a driver's license, etc. Also required are a pen and \$5.00 (except Novice) for the exam fee. WALK-INS are welcome. To register in advance, use a post card: print the grade of license you are applying for, and your name, address, and telephone number. Send the card to MRAC/VEC, c/o Jack Krause, W9JK, or Les Peterson, W9YCV at the addresses shown above.

BADGER EXAMINERS (BE) - MILWAUKEE

NOTE: CHANGE IN LOCATION.

Unless otherwise noted, examinations are administered beginning at 9:00 a.m. to Noon. at Grafton State Bank, Grafton, WI. Walk-ins are welcome. CW waiver forms are available. Please send a request with an SASE prior to taking an exam, so it is ready when attending the session. To register in advance, send a post card with your name, test or tests you wish to take, date you wish to take., your call sign, address and telephone number to Badger Examiners, Gary J. Sharbuno, W19M, 5119 W. Willow Rd., Brown Deer, WI 53223. Telephone (414) 355-0237.

MADISON, WI

VE exams are held in Madison every second Saturday morning (September through May) of the month at 8 a.m. They are held at the operations building of the Madison Metropolitan Sewerage District at 1610 Moorland Rd. To get there take the Beltline (Hwy 12 & 18) to South Towne Drive. Go south 8/10 mile till South Towne Drive makes a bend and becomes Moorland Rd. and enter at gate.

You should bring a picture ID, your origi-

nal licence and a copy of your licence. For exams beyond the novice tests, bring a check for \$5.60, made out to the ARRL/VEC. If the special 610 form with the medical exemption is required, contact me beforehand to obtain one. No appointments are necessary to take exams. For further questions, please leave a message on the mailbox or phone me at (608) 832-6631.

Mark NZ9B

MARSHFIELD, WISCONSIN

Sponsored by the Marshfield Area ARS. Second Saturday every other month, at St. Joseph Hospital, School of Nursing entrance. Room 124. St. Joseph Ave., Marshfield, WI. Walk-ins Welcome. Contact Walter Friant, WBOKIN, 2310 Wal-lonnie Dr., Marshfield, WI 54449. (715) 387-3870

RACINE, WISCONSIN - ARRL/VEC

Monthly - first Saturday, except January, July, and August.

Monthly exams are given 9:00 to 11:00 a.m. at the Red Cross Building, 4521 Taylor Avenue, Racine. Walk-ins are permitted.

Inquiries and registrations should be directed to William Firchow, Jr., NW9P, 1912 27th Street, Kenosha, WI 53140, telephone (414) 658-8390.

TOMAHAWK, WI

Last Saturday of every month. Jan. thru Oct.

Tomahawk Volunteer Examiners (ARRL/VEC). Tomahawk, WI. No preregistration required, but appointment would be appreciated. Registration at 8:30 a.m. and testings starts at 9:00 a.m. For location or other information, inquire on 145.43 MHz. repeater or contact: Greg Garner, WA9W, 4088 Highway 51, Harshaw, WI 54529. Telephone (715) 453-7096.

SIEVENS POINT, WI

Contact: Joe Larson, N9JW. (715) 344-1183.

EAU CLAIRE, WI - SWAPFEST

KAUKAUNA, WI - SWAPFEST

MANITOWOC, WI, LAKESHORE HAMFEST

RACINE, WI - BIG BOY TOY SHOW

RHINELANDER, WI - NWARC SWAPFEST

SIEVENS POINT, WI - CWRA SWAPFEST

WAUKESHA, WI - KMRA SWAPFEST

WAUKESHA, WI - MIDWINTER SWAPFEST

See the Swapfest column for additional information and contact persons.

DUBUQUE, IOWA - ARRL/VEC

Amateur examinations will be held on Aug. 21 and Nov. 20 in 1993.

Great River Amateur Radio Club VEs are now field stocked, which means retests can be given immediately.

Exams are held at 9:00 am at the Central Fire Station, 9th and Central in Dubuque. Use the basement entrance on 9th street. For more info, contact Mike Jozefowicz, NSOU, 2735 Hickory Hill, Dubuque, IA 52001. Or call Mike at 319-582-8563. Talk-ins are on the 147.84/24, 147.63/03 and 146.295/895 repeaters.

Arthur A. Evans, KA9KLZ

213 N Jefferson St.

Cuba City, WI 53807-1558

608-744-2704

APPLETON, WI - ARRL/VEC

MANITOWOC, WI (HAMFEST)

KAUKAUNA, WI (HAMFEST)

Conducted by the Fox Cities ARC VE team. Contact: Larry Siebers, (414) 788-3823

MENOMONIE, WI

The Northern Wisconsin RC will be sponsoring exams from 9:00 to 11:30 a.m. at the UW Stout Communication Center, 820 South Broadway, Menomonie, WI. Use the north entrance. Walk-ins only. Contact Jim Ley, NX9F. Work: (715) 232-1397, Home: (715) 235-3998.

RIVER FALLS, WI

Contact: Chuck Kelly, KA9YRV, (715) 425-2428.

LOVES PARK, IL

Third Saturday of every month. Northern Illinois Volunteer Examiners (Great Lakes ARC VEC). Held at North Suburban District Library, 6340 North Second St. (Hwy. 251), Loves Park,

IL. Contact: Paul K. Dean, WB9HCZ, (815) 987-6754.

Out of State Exams

Information Provided
by the ARRL/VEC



All are ARRL/VEC unless otherwise shown. Contact information from ARRL/VEC.

EASTERN IOWA

Cresco, 319-547-5329, Jim Murphy

Des Moines, 515-967-3890, Jim Snapp

Dubuque, 319-582-8563, Mike Jozefowicz

NORTHERN ILLINOIS

Dixon, 815-284-6380, Charles W Randall

Lincoln, 312-465-0981, Michael Leibovitz, WA9EVF

McHenry, 815-678-4276, Jack Hudson

Oak Forest, 708-448-9432, David Brasel

MINNESOTA

Apple Valley, 612-432-1640, Paul Ramey WC0G

Saint Paul, 612-888-6187, Jerry Jensen

St Paul, 612-222-7253, John Bellows

St Paul Park, 612-459-8678, David Harrell

This section of Badger State Smoke Signals is available to publicize your Volunteer Examiner Amateur Radio license examination schedules. Please send us your schedules of dates, times, and locations that you will be conducting examinations and we will include the information here. Be sure to include contact address and any other necessary requirements. Information should be sent to K9EN at the address shown on page 2.



SSB

SELL SWAP BUY

OUR WANT ADS GET RESULTS

WANTED: Collins shortwave receivers, especially model 390-A. Contact Mark Mathison, 417 e. Ogden St., Medford, WI 54451. (715) 748-5455.

FOR SALE: YAESU FT-767GX transceiver (mint), \$1050.00. CUSHCRAFT A-3S multiband beam (4 years old) \$200.00. CDE HAM 4 rotor, \$100.00 (beam must be sold first). HY-GAIN V-2S 2 meter vertical, \$40.00. 40 feet ROHN tower, \$100.00. HEATHKIT HM-2102 VHF power/swr meter, \$25.00. HEATHKIT HM-102 HF POWER/SWR METER, \$25.00. SWAN WM-1500 power/swr meter, \$30.00. CLEGG model 011 10 amp 12 volt power supply, \$30.00. QST collection 1934-1990, make an offer. CQ collection 1954-1975, make an offer. Contact: Jerry, WB9TKO, Sheboygan, WI (414) 452-3635.

FOR SALE: Colorful United States Stamps. 100 all different. \$1.00 postpaid. Richard Regent, K9GDF, 5003 South 26th St., Milwaukee, WI 53221.

MORE GENIE HUMOR..

The poor ham had found out his wife of 20 years had been having a continuous affair for all that time. They went through a long and bitter divorce. One day he bought a box full of radio stuff at the swap meet. when he got it home and started digging through it, he found (of course!) a magic lamp! he rubbed it and out came a genie. A female one at that!

She told him "Look, I'll tell you right off the bat, I don't like men. my last master was very cruel to me. I'll give you your three wishes, but what ever you get your ex-wife gets twice as much!! "Well what was the poor guy going to do? He said, "Well I'd like a million \$\$". The genie replied "Ok, but your wife gets two million...". "Go ahead" He said.

"For my second wish I'd like to be surrounded by a dozen beautiful women!!". "Ok, but remember, your ex gets two dozen handsome hunks!! "She replied. "Ok! Ok!

"He said. "Let me think about my last wish." After a few minutes, he said "Ok! I've got it! I want you to beat me half to death!"

Yuk! CUL ES 73 DE KC6OCM/MARK

Wisconsin Nets Association Ltd.

Rob Hummel, WA9ZTY, Secretary • 202 Midvale Drive • Marshall, WI 53559

Wisconsin Nets

Net	WNA	Freq.	UTC	CDT	Mgr.
BWN	Yes	3984	1100	0600	W9AYK
BEN	Yes	3985	1700	1200	KE9VU
WSBN	Yes	3985	2230	1730	K9UTQ
WNN	Yes	3723	2300	1800	KA9FVX
WSSN	Yes	3645	2330	1830	N9BDL
WIN/E	Yes	3662	0000	1900	WB9ICH
WIN/L	Yes	3662	0300	2200	W9NGP
NWTN	Yes	34/94	2330	1830	NS9Q
(Rhineland area)					
RCRA	No	01/61	2330	1830	KA9OMC
(Mondays CST) (Menomonie Area)					
Gr. Bay	No	72/12	0145	2045	WB9NRK
(Green Bay Area)					
ARES	No	4.65/5.25	0100	2000	
(South East/South Central Wisconsin)					
RACES	No	3993.5	1300	0800	WA9OAY
(LSB Sunday)					

Section Manager's Notes

Richard R. Regent, K9GDF
5003 South 26th Street
Milwaukee, WI 53221



There are 8,981 licensed amateurs in Wisconsin with 2,411 of them ARRL members. Please let others know of League benefits.

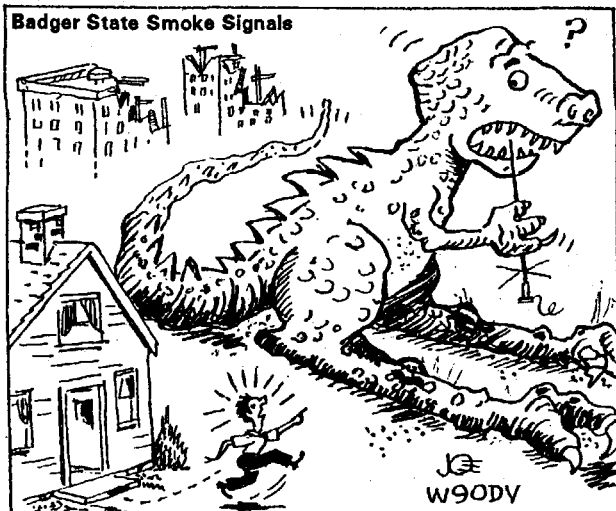
Mancorad Radio Club has become a Special Service Club. If you would like to know how your club can become a SSC or an ARRL affiliated club, contact our Affiliated Club Coordinator, K9FHI.

Are you interested in the technical activities of Amateur Radio or would like to be a technical advisor? Then ask me for information about becoming an ARRL Technical Specialist.

Exams: September 11 Madison, Marshfield and Oak Creek; September 15 West Allis; September 25 West Allis and Tomahawk.

Sorry to report Silent Keys KA9YQP and WB9SVL, both from Baraboo.

Thought of the month: *Of two possible events, only the undesired one will occur.* □



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Net News and Gossip

Written and Edited by the Net Managers

Wisconsin Intrastate Net/Late (WIN/L)

Ed Rice, W9NGP, Net Manager
W-126 Lang Road
Oconomowoc, WI 53066

The first half of 1993 is gone already, and the 2200 club is rolling along in fine shape. All our NCS positions are filled, and we nearly always have a 9RN rep to handle messages destined for places outside Wisconsin. If you still have traffic at 2200, check into the WIN/L and let us have a try. You phone operators: dust off the keyer once in a while and join us.

If you like statistics, here are some perfor-

mance records for April, May, and June of 1993.

- N9BDL checked in 88 times out of a possible 91, and he was NCS 18 times in the 12-week period.
- W9CBE was 9RN 34 times.
- W9YCV checked in 81 times, and was 9RN 14 times.
- The total QNI for the first half of 1993 is 1223.
- The total QNI for the first half of 1992 was 1159.
- The total QTC for the first half of 1993 is 308, compared to 367 for 1992.

Thanks to all who the regular members who took over my NCS while I was exploring in KL7 land.

73, Ed

Field Day 1993

Thanks to all those who participated in the ARRL event of Field Day, 1993. The following message originations reached me:

Group	Call	Location	Ops/ARES
Calumet ARES	KN9P	Calumet Co. Park Stockbridge	11/7
Central WI RA	W9NN	Schmeeckle Reserve	21/21
Flambeau ARC	KQ9J	Park Falls Boy Scout Troop 551	12/0
Four Lakes ARC Madison	W9JZ 20/5	Black Hills Ski Resort	
Green Fox ARC	KE9EJ	Zobel Park Green Lake	20/20
Kettle Moraine RA	N9KS	Hillcrest Park Waukesha	40/20
Menomonee Falls RC	K9RHH	Homestead Hollow Park Germantown	8/6
Mississippi Valley RC	WC0V	La Crosse	15/2
Ozaukee RC		Lazy Days Campground West Bend	21/21
PBR Please	N9AU	Waupaca	4/3
Riverland ARC	W9UP	West Salem	10/6
Rock River RC	KB9GDY	Dodge County Park	22/15
W/K ARC	N9AW	Oak Creek	12/5
Washington Co ARC	K9GR	St. Lawrence	16/10
Watertown ARC	N9HR	Richwood	8/8
West Allis RAC	W9FK	Crystal Ridge Franklin	10/2
Wisconsin Rapids	W9DQA	Wisconsin Rapids	10/0
Yellow Thunder ARC	WB9FDZ	Owen Park Columbia County	17/0

There is no guarantee that messages sent to me will actually reach me, but sending them properly with packet radio, NTS or other means is important as a rehearsal for possible emergency communications.

During Field Day, NS9J sent his first message over ham radio. It was his club's FD message on 3985 SSB directly to me. I met NS9J less than an hour later on one of my visits to clubs in the area at his West Allis RAC Field Day site of Crystal Ridge, near Franklin. After the group cured low line voltage on transmit from their generator, not only did WARAC get loads of contacts but members had fun learning procedures and fixing equipment.

At the South Milwaukee ARC in Froemming Park southwest of Milwaukee, N9KEZ said, "I heard about 70 mph winds and tornadoes which touched down in Walworth and Kenosha," where other clubs could be participating in FD. There were dark blue skies in that direction, and we could hear considerable QRN on the lower HF bands. We were concerned that our fellow amateurs in the storm area and in Illinois would be safe and dry.

The W/K ARC in Oak Creek had NK9G using the NA program on a computer lap top, which sends the call and Field Day exchange besides doing logging and duping. Plenty of listening skills and high speed typing helps with such high technology. There was some rain here too that N9AW was blaming for getting the club's emergency power generator points wet. They switched to a backup generator.

Part of a rainbow could still be seen to the southeast, while FD contacts were being made as I left the site.

Hope your Field Day was enjoyable, even if it was a bit wet.

- Richard Regent, K9GDF
Section Manager,
Wisconsin Section ARRL
5003 South 26th Street
Milwaukee, WI 53221

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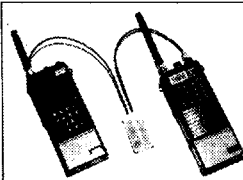
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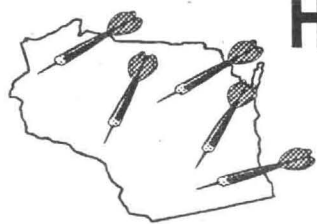
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HERE and THERE

ARRL Scholarship Winner Plans to Study at MIT

An 18-year-old Amateur Extra Class licensee headed for the Massachusetts Institute of Technology is the top ARRL Foundation Scholarship winner for 1993. Phillip Rowe, KA3TOK, of Harrisburg, Pennsylvania, has been awarded the \$5,000 ARRL Scholarship honoring Barry Goldwater by the Foundation Committee.

Phillip graduated first in a class of 315 in June from Central Dauphin High School, where he was editor-in-chief of the school paper, *The Rampage*, and a member of the wrestling team. He's also a member of the Civil Air Patrol.

Phillip, who advanced from Novice to Extra beginning in 1988, says Amateur Radio inspired his interest in science "from the beginning." He'd like to "build or design my own rig."

KA3TOK was accepted by MIT in December. He plans to major in electrical engineering.

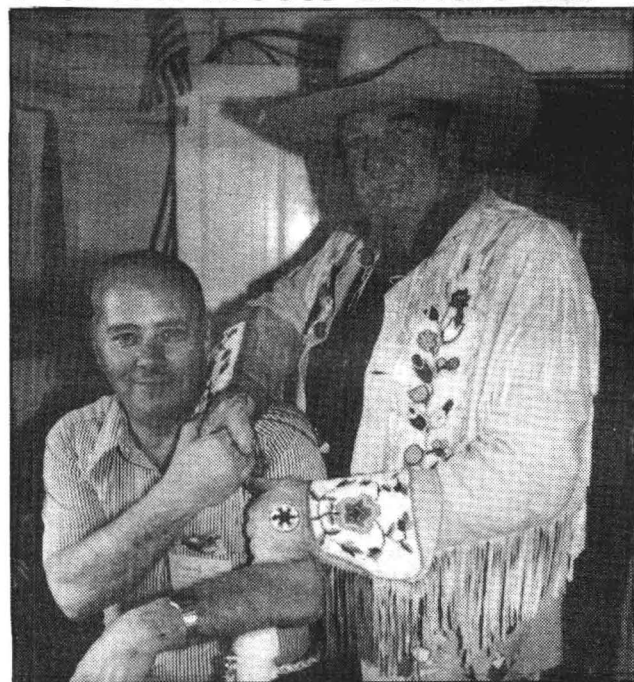
Wisconsin Winner

The winner of one of two \$1,000 ARRL Foundation General Fund Scholarships is Steven D. Kraft, KE9RW, of Menomonie.

(There are many other scholarships which are administered and/or awarded by the ARRL Foundation. To apply for 1994 scholarships, write to The ARRL Foundation, Inc., 225 Main Street, Newington, CT 06111. The deadline for applications is February 15, 1994.)

- Condensed from *The ARRL Letter*, 6/28/93

W9ATK Meets Buffalo Bill



Aboard the Great Circus Train 1993, Jack McLeland, W9ATK, left, of Milwaukee, shakes hands with "Buffalo Bill Cody". Buffalo Bill is portrayed by Col. Al Huffman, of Evergreen, CO, who has been playing the role for 30 years. Buffalo Bill (W.F. Cody) was born in Iowa in 1846. His Wild West Shows entertained and educated thousands of people. He was environmentally minded, and also helped form the Boy Scouts. The original Buffalo Bill died in 1917.

SAREX Update

SAREX shuttle flight STS-57 returned July 1. STS-58 on September 10 will also carry SAREX; Payload Specialist Martin Fettman has received his amateur call sign: KC5AXA, and STS-58 pilot Rick Searfoss has taken his amateur license exam. SAREX flight STS-60 is scheduled for a November 10 launch.

- *The ARRL Letter*, 7/10/93

FCC Rejects Discrimination Complaint by Examiner

The FCC has denied a complaint of discrimination by Leonidas Moten, WD8POF. Moten, who is visually impaired, alleged he was improperly excluded from acting as a volunteer examiner by a local VE team. In April, the FCC found that Moten did not meet the requirements to be a VE, and thus no improper discrimination occurred. Moten appealed that decision to the FCC, which on June 25 denied the appeal.

- *The ARRL Letter*, 7/10/93

Volunteer Exam Coordinators Hear Latest from Commission

The National Conference of Volunteer Examiner Coordinators met June 17 and 18, 1993, in Gettysburg, Pennsylvania. VECs met on the first day and were joined by Federal Communications Commission Representatives on the second. Representing the ARRL were ARRL/VEC Manager Bart Jahnke, KB9NM, and Atlantic Division Director High Turnbull, W3-ABC, and Atlantic Division Vice Director Kay Craigie, WT3P.

Here are highlights of topics discussed and actions taken by the VECs:

- The Conference voted to recommend that all VECs use the questions, answers and "distractors" as released by the VEC Question Pool Committee. Some VECs use a true/false system for answering, which the Conference wants to eliminate.
- The Conference voted unanimously to ask the FCC to follow up on *every* Physician's Certification (for Morse Code exemption) by sending their standard letter of inquiry to each certifying physician, to confirm that the physician understands the process and is aware of the available accommodations offered by volunteer examiners.
- In the matter of multiple-choice Morse code exams, the Conference voted to recommend that each VEC/VE use the following standards:
10 questions, four or more answer choices, with 7 correct out of 10 to pass. The Conference also voted not to permit true/false or transcription tests (where the applicant fills in ten holes in the message and no questions are asked).
- The Conference voted to direct the QPC to develop any proposed new question formulas (Section 97.503 c. of the FCC Rules) and to seek the necessary rules revisions (or deletions) on behalf of the Conference.
- The Conference voted to request that each

VEC include the applicant's signature on the Certificate of Successful Completion of Examination, for identification purposes.

Later, John Johnston, Chief of the FCC's Personal Radio Branch Special Services Division, reviewed the Foreign Visitor Amateur Licensing proposal (PR 92-167), which still awaits action by the FCC Commissioners.

FCC staff discussed enforcement and volunteer examiner accountability, including the number of examiners now required at a test session and their responsibilities.

The FCC staff pointed out that they issue some 125,000 amateur call signs a year, including new licenses, upgrades, renewals and changes, and discussed the current proposal for the issuance of club and military recreation call signs by recognized amateur organizations. They also noted the status of proposals seeking special call signs for individuals.

The FCC staff reiterated its firm stance on when instructors also may be volunteer examiners (and when they may not), and discussed the ARRL VEC's waiving of exam fees for Elements 1A (5 WPM CW) and 2 (Novice theory).

Several of the FCC's data processing specialists attended, to discuss the Commission's future computer upgrades and electronic automation with VECs. They estimate that with the new system, paper applications could take just seven to 10 days for processing (rather than six weeks or more), electronic disk files three or four, and electronic applications via an FCC BBS might take as little as one or two days.

Present at the annual meeting were the following VECs: ARRL, W5YI, Central Alabama, Western Carolina ARS, Great Lakes, Sunnyvale (CA), Greater Los Angeles ARG, Laurel ARC (MD), Mountain (WV), Golden Empire ARS (CA), and San Diego.

- *The ARRL Letter*, 6/28/93

FCC Issued Call Sign Update

The following is a list of the FCC's most recently issued call signs in the 9 and 0 districts as of August 1.

District	Group A Extra	Group B Advanced	Group C Tech/Gen	Group D Novice
9	AA9HR	KF9QI	N9UFS	KB9ISZ
0	AA0OE	KG0HD	N0XRX	KB0LJZ

- Thanks Karl Simonson, KB9EQI

Six-Meter Repeater on the Air

A six-meter repeater has just been activated. It is located in Fort Atkinson. Frequency is 52.090 in and 53.090 out. PL 123.0 Hz. It appears to be linked to a 440 repeater at Baraboo. Seems to have excellent coverage of this area.

- WB9ADB via packet

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The Military Affiliate Radio System (MARS)

What it is, what it does, and how to join it

By Gene Santoski, K9UTQ
1220 Street South
Wisconsin Rapids, WI 54494

Have you ever tuned around just above or below the amateur bands and heard strange call letters such as NNN0IBD or AAF4GFV, or AFA9-MDI? Well, what you were hearing were MARS calls. No - not from the planet Mars, but terrestrial stations whose operators have volunteered their equipment and time to send and receive messages to and from military personnel all over the world.

What is MARS? The Military Affiliate Radio System is a Department of Defense sponsored program, established as separate managed and operated programs by the Army, Navy/Marine Corps and Air Force.

The program is comprised of licensed Amateur Radio operators who are interested in military communications. They provide auxiliary or emergency communications on a local, national, and international basis.

In November 1925, the Army Amateur Radio System (AARS) was formed by members of the U.S. Army Signal Corps at Ft. Monmouth, NJ. During WW II, AARS operations were suspended. Operations were again resumed in 1946 and operated until 1948, when the Army and Air Force established the Military Amateur Radio System, later renamed the Military Affiliate Radio System (MARS). In 1962, the Navy-Marine Corps MARS program was created.

The mission of the MARS program is many fold:

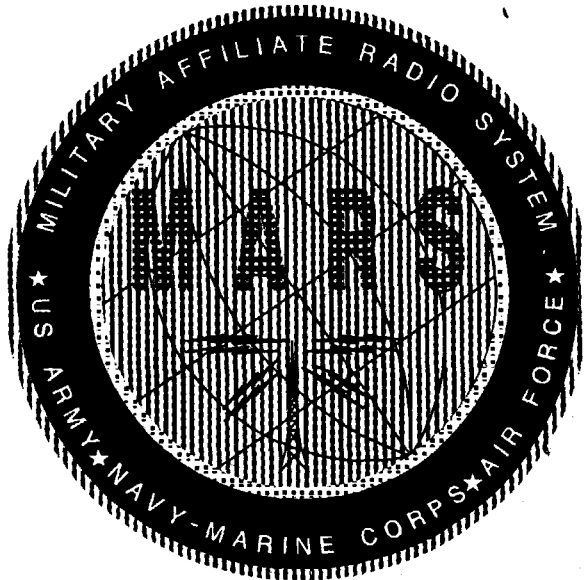
- Provide Department of Defense sponsored emergency communications on a local, national and international basis as an adjunct to normal communications.
- Provide auxiliary communications for military, civil, and/or disaster officials during periods of emergency.
- Assist in effecting normal communications under emergency conditions.
- Create interest, and furnish a means of training members, in military communications procedures.
- Provide a potential reserve of trained radio communications personnel.
- Handle morale and quasi-official record and voice communications traffic for Armed Forces and authorized U.S. Government civilian personnel stationed throughout the world.
- Conduct an appropriate Amateur Radio program as a part of the annual celebration of Armed Forces Day.

Membership Eligibility

The applicant for MARS must 1) be 14 years of age or older; 2) be a U.S. citizen or resident alien; 3) possess a valid Amateur Radio license issued by the Federal Communications Commission or other competent US authority; 4) possess a station capable of operating on MARS HF frequencies.

MARS members must agree to operate in accordance with the rules and regulations governing MARS as follows:

ARMY - A minimum of 12 hours per calendar quarter with 6 hours being on HF networks.
AIR FORCE - A minimum of 12 hours par-



ticipation per calendar quarter with 6 hours in their primary HF assignment.

NAVY/MARINE CORPS - A minimum of 18 hours per calendar quarter with 12 of the 18 hours being on area or region HF networks.

Membership Benefits

- Add to the enjoyment of your Amateur Radio hobby through the expanded horizon of MARS.
- Become part of the Army, Navy-Marine Corps, or Air Force MARS worldwide communications system.
- Increase your communications skills and capabilities. Selected correspondence courses in communications-electronics subjects are available free to MARS members from their respective affiliated service after completion of six months active membership.
- Operate on specially-assigned military radio frequencies in voice, RTTY, CW, and packet modes.
- Join a group of dedicated fellow radio Amateurs participating in meaningful public service.
- Participate in regulated, disciplined radio nets with structured lines of organization and very specific operating rules.
- Participate in the MARS Excess/Surplus Equipment Program after 6 months active membership. Issue of equipment is based on availability of equipment, and possible assigned mission of individual activity.

Typical MARS Frequencies

MARS members stations meet periodically in scheduled networks on military frequencies outside of the Amateur bands. There are various types of networks and each accomplishes a specific goal. There are also technical nets and training nets. MARS nets operate on different modes. HF SSB is the predominant mode; there are even SSTV nets.

How to Join MARS

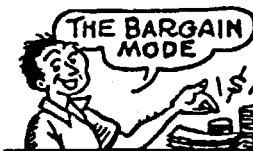
You may join either Army, Navy-Marine Corps, or Air Force MARS, but you may not join or belong to more than one MARS service at the same time. To join, send a request for application forms to the appropriate MARS representative as follows:

ARMY MARS: Chief Army MARS, HQ, US Army Information Systems Command, ATTN: AS-OPS-O A, Fort Huachuca, AZ 85613-5000.

NAVY/MARINE CORPS MARS: Chief Navy-Marine Corps MARS, Naval Communication Unit, Washington, DC 20397-5161.

AIR FORCE MARS: Chief Air Force MARS, HQ, AFCC/DOCC, Scott AFB, IL 62225-6001.

Or, contact any local MARS member for information. □



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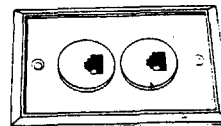
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Balloon Flight Successful; Contacts Satellite, Scares Horse

By Dave Mullenix, N9LTD

2502 Brentwood Parkway, Madison, WI 53704

(BSSS published a story about this balloon flight last month. We were not aware that a longer, better, and much more detailed story was enroute to us. We present it here, and hope you enjoy it.)

In a rare juxtaposition of 19th and 20th century technologies, a weather balloon launched by the High Altitude Radio Project managed to send a signal through an orbiting satellite and scared a plow horse - all in one flight.

The balloon was launched from Hillsboro, WI at about 10:39 a.m., Saturday, June 12th, with Joe, WB9SBD, doing the honors as launch master. Its payload consisted of an older model Motorola FM HT converted to transmit CW on 145.890 by Pete, AA9AD, and a CMOS/EPROM keyer built by Brad, WB9WHI. It also had a flea power beacon transmitter on 145.936 MHz lent by Tom, WT9E, and a Sonalert type audio beeper mounted on the outside of the package.

The main goal of the flight was to transmit a morse signal through the Russian amateur satellite RS-10/11, which was scheduled to come over the horizon at 10:48 a.m. that morning. We wanted to do this, both because it has apparently never been done before, and to see if a satellite could be used to help track a possible future around the world balloon flight.

Preparations for the flight went "smoothly", which is a technical term meaning that the transmit crystal didn't arrive until a few days before the launch date, the HT turned out to have a chirp so bad that fast Morse sounded like Pac Man and the keyer circuit broke into oscillations when put in a high RF field. Luckily, WB9WHI had innocently scheduled his vacation for the week before the flight. He and Kevin, WB9YHB, only had to work on the keyer until midnight Friday night. It was no problem - they must've gotten at least three or four hours sleep that night.

We also discovered that a crucial adapter wouldn't mate the regulator to the gas tank until we started to inflate the balloon, but WB9SBD solved that problem with some electrical tape. Regulators are for wimps anyway; real men work with 3000 pound per square inch hydrogen, right out of the bottle. We finally launched an hour late, which means it was a typical balloon launch in all respects.

Because the winds were very low, we put a minimal amount of gas in the balloon so it would rise slowly and we'd get a nice long flight. As the balloon left the ground, we watched it disappear towards the west, which was a bit unfortunate as all of the chase crew people were south and east of Hillsboro, the directions most flights take.

Ten minutes after launch, RS-10/11 came over the northern horizon on a pass that would take it over the Great Lakes and down past the Gulf of Mexico. Although we couldn't hear it at Hillsboro, where we had only portable short wave radios and whip antennas, AA9AD heard and tape recorded our signal on the satellite's ten meter downlink, making the flight an instant success fifteen minutes after launch. The satellite was 600 miles high at that time. The fact that we were able to work it with two watts into a rubber duck antenna says a lot about the sensitivity of the Russian amateur satellite receivers. The downlink signal should have covered all of the Continental US. We know it made it to the East Coast because we've already received a QSL card from Massachusetts.

Flushed with victory, the launch crew settled down to socializing with WB9SBD and his family, who we talk to but seldom get to eyeball. Mike, N0OFB, was doing an excellent job as net control, gathering directional bearings from the rest of the chasers and giving out estimated position reports. We'd put only a little gas into the balloon, so we knew we'd have at least a two or three hour flight and there was no need to start chasing it immediately. Consequently, we were all quite surprised when the balloon disappeared an hour after launch!

It took about 20 minutes of searching with the .88 machine to convince

everybody that the balloon had landed prematurely. It didn't seem possible, but nobody could think of any other reason why both the .890 and .936 signals would both disappear at once, since they were completely independent of each other. With a sinking feeling in our hearts, we threw the launch equipment into the cars, bid farewell to Joe and his family and took off in the general direction of the last heading. The .88 machine resounded with the voices of the rest of the chase crew heading north.

A council of war at the Mauston Hardee's led to the area west of that city being divided up and a crew consisting of N0OFB and his wife, Terri; Domenic, KA9QFK; Steve, who is waiting for his license to arrive; Don, N9TOR; Steve, WB9ZRE; Jeff, N9QHB; Bill, KA9QFJ; Jim, N9KAN and myself took off to scour the country side. We did that for the next five hours without hearing so much as a peep from the balloon! Actually, Jim, N9LKY may have heard the signal briefly. He reported what sounded like Morse on 145.820 south of Mauston, and we learned later that the balloon's frequency had dropped that low before it disappeared, apparently from the 30 below temperatures it encountered at altitude, but we were never able to pick it up again.

As the mileage mounted and the sun got lower, we began to think we might have finally lost a balloon. If so, it would have been the first loss since WB9SBD started launching these things back in 1991. If it was lost, this was a good package to lose since it was fairly low value. The main transmitter was purchased for \$1.00 at a hamfest and had a receiver so badly busted that not even AA9AD could bring it back to life and he's been repairing these things for a living for a decade or two. The keyer was only a couple of chips and the on board lithium batteries were a one shot deal anyway. The only parts of the payload I really wanted back were WT9E's flea power beeper and the beautiful parachute manufactured by Theresa, N9SZB (who is also Mrs. AA9AD). When we'd asked her to sew up a 'chute, we'd expected something along the lines of a piece of worn out bed sheet with some twine tied to the corners. Instead, she and AA9AD had checked out books on parachute design and theory from the library, and delivered a beautifully sewn black and orange beauty that would have looked good mounted on a NASA payload.

Still, as the sun sank towards the horizon in the west and the trip odometer edged up towards the 300 mark, we began to realize we might never see it again. People gradually checked out of the chase crew as outside duties called them away, and finally even N9KAN and myself decided to pack it in and start back towards Madison. We kept listening on the way back and I did some beam scans while Jim did some work on his repeater in North Freedom (443.675) but heard nothing. I checked into KA9-QFK's simplex repeater in Reedsburg (145.73 / 67Hz PL - try it, it's a blast!) but he'd come up empty too. As we neared Madison, N9SZB came on the air on her way home from work and I had to give her the bad news that she would probably never see her handiwork again.

Luckily the early start and all the running around on Saturday made me go to bed early that night because at 7:30 Sunday morning, I got a phone call from a farmer in Kendall, which is 10 miles due north of Hillsboro, asking me if I'd lost a florescent orange box that went "Beep! Beep! Beep!"? He figured out from my whoop that I had. It turned out that it had landed on the farm of his neighbor, who was Amish and didn't have a telephone, and he was calling for him. (I'd written

"HARMLESS", "LOW POWERED HAM TRANSMITTER" and my name, address and phone number on the outside of the package.)

He gave us directions to his place and N9KAN and I headed north again, putting out the word of the recovery on the CWRA Swap Net, which was in progress on the Baraboo .88 machine. When we found his farm, he gave us instructions to his neighbor's farm, which was farther out into the country. Sure enough, when we got there we heard a faint Morse signal on 145.890! The package was still transmitting 24 hours after launch. As we pulled into the driveway, we could even hear the Sonalert beeping. A knock on the farmhouse door brought a very nice gentleman in his late twenties out of the house and he led us to a nearby pine tree. Siting under the tree were the parachute, payload and the remains of the balloon!

While I cut the tape holding the top on the package on so I could unplug the Sonalert's battery, the farmer told us how he'd been out plowing his field with his horse Saturday when the horse started getting skittish for no apparent reason. A few minutes later he heard a faint "beep beep beep" and started looking around and spotted our brown weather balloon, still partly inflated, the parachute and the florescent orange payload floating down from the clear blue sky! He and the horse both watched as it landed and tangled itself up in a fence. This was too much for the horse, who refused to do any further plowing, so the farmer untangled it and tossed it over the fence (Editor's note: By "it," we assume the farmer threw the balloon and package over the fence, not his horse.), where it drifted into a tree and the balloon finally popped.

This calmed the horse down enough so he finished plowing the field and when they went in for lunch, the farmer took the package with him and put it inside his granary to muffle the sound from the Sonalert - a sheet metal granary! As soon as he said that, we knew why nobody had received any signal from the balloon!

Luckily, he was a really nice guy and seemed to be amused and interested in the whole affair. We explained what we were doing as best we could and promised him a QSL card and a letter giving more details and he should have them by the time you read this.

The balloon should have risen to about 100,000 feet, expanding as it rose until it finally popped and then the parachute was supposed to lower everything safely to the ground. However, weather balloons are made to be bio-degradable and ours, which was almost two years old, apparently bio-degraded before launch. It got so porous that the hydrogen leaked out before it expanded enough to pop and the whole thing landed prematurely. I'll pay a little more attention to the expiration dates next time - when they say the balloons are good for one year, they mean it!

The parachute and payload are home now and we're starting to plan flight number two. We haven't decided exactly what we'll launch yet, although we're trying to repair an old camcorder. One thing we do know - the Sonalert will have an externally mounted OFF switch!

If you heard either the uplink or downlink signals from the flight, send a note and an S.A.S.E. to H.A.R.P., Box 14748, Madison, WI 53708, and we'll be happy to send you a QSL card commemorating what may be the only Balloon - Satellite - Horse flight to ever be launched.

Meanwhile, if YOU would like to launch a balloon full of Amateur Radio equipment, WB9SBD would like to get in touch with you. He knows the balloons, the FAA, how to work with hydrogen without getting blown to kingdom come, where to get flight predictions and all the other esoteric knowledge you'll need to pull off a successful flight. If you have an idea for a payload, get in touch with him. It's not too expensive - a balloon, batteries and hydrogen will set you back less than the cost of a used HT. Catch Joe on the Baraboo .88 repeater or on the Madison/North Freedom 443.400/443.675 machines or write to him at the address above. Remember, you're licensed by the Federal Government to do interesting things. □

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League Asks FCC for Relief from Municipal Scanner Laws

Continued from front page

constitutes a licensing function reserved with respect to Amateur Radio operation to the Federal Communications Commission," the League told the Private Radio Bureau.

"The Commission has specifically held," the League said, "that municipalities cannot prohibit Amateur Radio operation in their jurisdictions, but rather must make reasonable accommodation for such operation. These ordinances fly directly in the face of express Commission policy, just as if the municipality had prohibited Amateur Radio operation entirely, or prohibited antennas entirely."

- The ARRL Letter, 6/28/93

Happy Birthday!



Happy birthday on August 1 to my sister, Mary, who lives in Louisville, Kentucky. I always try to find the most flattering photo I can to commemorate her day of birth. This one, taken a couple of years ago, may or may not meet her definition of "flattering," but it was the best I could find in a year of digging. She was lip-synching and swivel-hipping Elvis Presley's "Hound Dog" with her Mickey Mouse guitar at a Baraboo talent show. Show proceeds went to the March of Dimes to help find a vaccination against poliomyelitis. Many happy (and better) returns, Mary.

- Your brother, Jim, K9ZZ

League Takes Actions to Protect Amateur Privileges

Continued from front page

every transmission from the licensee's station, regardless of the configuration of the system of stations in a data network or whether the station is in repeater operation.

"The League supports the Commission's proposal to more specifically define the proper limits of accountability for both repeaters and message forwarding systems," the ARRL filing said. "This proceeding is timely, and is aimed at facilitating the development of rapid data networks and other systems in the Amateur Radio Service. The proposed rules, if modified slightly will remedy the lack of clarity in the degree of accountability of amateur stations in repeater operation and those participating in message forwarding systems."

"The League believes that the Commission has arrived at the proper policy limitation on liability of individual amateur stations for inadvertent retransmission of messages which may violate Commission content regulations. It has placed the repeater owners, and the participants in a message forwarding system, in the proper positions relative to the prevention and elimination of improper messages, according to their actual ability to prevent or eliminate an offending message."

"The Commission should clarify," the League said, "the nature of the obligation of the first forwarder in a message forwarding system, so as to permit either an authentication arrangement with respect to the originator of the message, or a message screening provision. Either should be deemed sufficient to discharge the control operator's obligation to exercise control as a 'first forwarder.'"

"Also, the definition of 'repeater' and the identification of the 'first-forwarder' bear some modification as well," the League said.

A Varied History

The League's lengthy and comprehensive comments note that before the establishment of automatically controlled packet radio networks in the Amateur Service, the Commission had faced the development of voice repeaters. These were well-suited to automatic control, which the FCC authorized in 1975. The Commission ultimately was persuaded to change its initial plan for recording and monitoring of repeater transmissions (for enforcement purposes), saying that amateurs' long history of self policing would be expected to suffice.

Thus, "closed" repeaters were allowed to operate under automatic control without a monitoring requirement and "open" repeaters were required

to have real-time monitoring or recording for later review. In 1978, this policy was re-emphasized, when the FCC simplified licensing requirements for complex amateur systems, including repeaters.

But in 1982 the allocation of accountability for message content changed abruptly, when James C. McKinney, chief of the Private Radio Bureau, held that an amateur who operated a voice repeater would be considered just as accountable for a content violation as the originator of the message.

This holding was in response to a petition two years earlier seeking to change the amateur rules to exactly the opposite - that the repeater operator would *not* be held responsible.

When asked to reconsider, McKinney went further, saying that since the licensee of an amateur station is responsible for its proper operation, then a "necessary corollary" to the FCC rules is that "if one is responsible for something, it must be under one's control"

McKinney concluded that "control" is not severable into technical control, content control of messages the repeater licensee originates, and content control of messages originated by repeater users.

In an FCC Order released April 23, 1982, McKinney said that violation of FCC rules on repeaters should be countered by the repeater licensee; to prevent them from happening again, and said that might even involve shutting down the repeater.

"We are not persuaded that repeater operation is sacrosanct and that it needs to be kept open at all costs, when to do so is to allow the retransmission of violative communications," the FCC order said.

New Problems with Packet

When the development of extensive packet radio networks accelerated in the mid-1980s, the FCC adopted a Report and Order (in Docket 85-105) to permit amateur digital communications under automatic control on VHF frequencies. But local control was required for third party traffic, a requirement to which the ARRL took exception, since it would not allow for digipeaters and other intermediate relay stations.

The FCC then agreed to a temporary waiver of its rules to eliminate the local or remote control operator requirement for packet communications only when the ARRL AX.25 protocol was used.

The League now points out that with this 1986 action the FCC "understood that only after-the-fact screening of messages is possible since the control operator of a given station can only indirectly supervise the station transmissions."

The FCC's 1986 action seemed, the League said, to revert to the Commission's policy on voice

Please turn to page 10

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ARRL Acts to Protect Amateur Privileges

Continued from page 9

repeaters before the changes instituted by the Private Radio Bureau in 1982. But it was a brief reversal, however, because in 1990 an ARRL request to allow automatic control of all third party VHF communications (rather than only AX.25) was denied by the FCC.

The League asked in a petition for rule making that the responsibility for message content be solely that of the originating station, but the FCC would not propose such a rule, saying that "all rules apply individually to each amateur station in [a] system, not to the resulting system. Each station licensee and each station control operator is as responsible for the messages transmitted as those retransmitted by the station."

Now the League, suggesting that policies have been "uneven" over the years, has called for a "zero-based review" of amateurs' accountability for message content.

Enforcement Issues

The League listed several matters "not subject to significant debate":

- While the originator is the root cause of a violative message, it can be difficult to identify that station within a message forwarding system. In the past there has been a burden of proof on the FCC to make that identification, and that same difficulty stifles amateurs' ability to police themselves, always a plus.

- Data messages, unlike voice repeater transmissions, tend to take on a life of their own as they propagate through a system; the violation continues.

The League agrees with the FCC that holding accountable station licensees beyond the originating station is justified, but that the methods used must be fair and not stifle the development of future, more advanced amateur systems.

But the nature of the "first forwarding station" should be revised, the League said. It should be to "establish with reasonable certainty the identity of the amateur station originating a particular message." In other words, the first-forwarder should be responsible for message content only if the originator cannot be identified.

The definition "first-forwarder" also needs to be clarified; it should be, the League suggested, the first upstream store and forward system in the message forwarding network (and not, for example, a digipeater located between the message originator and the first BBS-type station).

Finally, the definition of a "repeater" in the new rules should distinguish between traditional repeaters, which receive and transmit simultaneously, on separate receive and transmit frequencies, and automatic message forwarding systems.

FCC AIRS PLAN TO RELOCATE WIND PROFILER RADARS

The League has told the FCC that a proposal to allocate the frequency 449 MHz for wind profiler radar systems should be based only on careful coordination processes and site selection, to avoid interference to amateurs, who share on a secondary basis the band 420-450 MHz with government (military) radiolocation operations.

On April 1, 1993, the FCC issued a Notice of Proposed Rule Making (in ET Docket 93-59) to make the allocation, and asked for comments on whether wind profilers should also be accommodated in the 915 MHz band or elsewhere.

The League told the FCC that the 420-450 MHz band is heavily used by the Amateur Radio Service, especially for FM repeaters, it being the second most popular VHF/UHF amateur allocation; 5,159 repeaters in the band are listed in the latest ARRL Repeater Directory.

These repeaters are used for public service communications, especially in metropolitan areas, and are important in the connection between Amateur Radio and the SKYWARN severe weather warning system, the League said.

The League said that it appears possible that government wind profilers could be used in this band without disrupting existing amateur operations, but only with proper coordination. The League noted that it already has an agreement with the National Weather Service, the government agency that would operate wind profilers, covering support of emergency communications.

In order to provide both public service communications and to assist agencies like the NWS, amateurs have invested large sums of time and money for the 420-450 MHz band, the League said. "There is therefore an apparent need to include interference protection criteria for amateur stations in the 440-450 MHz band in any site selection plan for wind profilers, so that individual repeater stations are not driven off the air," the League said.

Siting is Critical

On the other hand, non-government profilers should not be permitted to operate on 449 MHz, the League said, since while government profilers likely would be located away from metropolitan areas, that would not be true of profilers operated by universities or other non-government licensees, thus greatly increasing the possibility of interference to existing amateur repeater and other operations.

The League cited its assistance to both domestic and international allocations committees that deal with wind profilers, noting that there are currently no allocations for them. It is arguable, the League said, that profilers should logically be operated within radio bands allocated to the meteorological aids service, since that is what they are. But profilers now operating experimentally at 404.37 MHz have proven unacceptable since they interfere with earth-to-space satellite links at 406 MHz.

The U.S. government advisory groups decided to recommend allocating 449 MHz to wind profilers, since that was at the upper band edge of a current allocation for government radiolocation services, "clearly not a good choice" from the viewpoint of the Amateur Radio Service, the League said.

Assuming that it is necessary for economic reasons or otherwise to choose a single frequency for wind profilers, the League said, it would have suggested a more thorough study of alternative frequencies within the 440-450 MHz band.

For example, the League said, 446 MHz might have been a better choice from amateurs' point of view, that being in the middle of the 445-447 MHz "gap" between repeater inputs and outputs.

The League said that if existing 404 MHz experimental wind profilers were to move to 449 MHz, interference to amateur repeaters in certain locations will result. But by site selection, coordination of which is being developed between the League and the government, such interaction with amateur repeaters can be avoided.

On the other hand, the League said that such interaction might not be possible with non-government profilers, and that if they are permitted at 449 MHz they should be prohibited in metropolitan or suburban areas, where disruption of amateur public service and emergency communications "is a virtual certainty."

The League also pointed out that technical standards for wind profilers, including bandwidth, have not yet been completely specified, making it unfair for the public to be asked to comment on their allocations. The League requested that the Commission issue a "Further Notice" to provide such information.

Profilers at 915 MHz

In addition to the proposal for a wind profiler allocation at 449 MHz, the FCC's NPRM also announced a Notice of Inquiry for input regarding an allocation in the range 902-928 MHz.

The League said that adding a 12.5 MHz wide channel centered on 915 MHz for profilers to the services already there would add to an "already uncomfortable melting pot of uses." Adding profilers to a proposed AVM addition to the band would "bring the band closer to 'gridlock' status," the League said.

For this reason, the League said, the FCC should not act on wind profiler radars at 915 MHz without taking into account the possible impact of its proposal to allocate AVM systems there. "The allocation of both would work a distinct hardship on the Amateur Radio Service," the League said.

(More information on wind profiler radar systems appears in QST for March, 1992; April, 1992, page 22; and June, 1992, page 48.)

ADDING ANOTHER SERVICE TO CROWDED 902-928 MHz

"Adopt no rules without further study," the ARRL has recommended to the FCC, in a Commission proposal to expand the use of Automatic Vehicle Monitoring (AVM) systems in the 902-928 MHz band.

The proposal, in PR Docket 93-61, would allow the expansion of AVM systems through the creation of a new location and monitoring service (LMS) in the 902-928 MHz band. Amateurs already share this band with government radio location, fixed, and mobile services, in addition to industrial, scientific, and medical (ISM) equipment and various non-licensed, low power "Part 15" devices.

The FCC said in its Notice of Proposed Rule Making that such an expansion of AVM "could lead to rapid congestion of available spectrum," and asked if they could handle any increased congestion.

"If not," the FCC said, "commenters should offer potential solutions, short of removing Part 15 users and amateur operations from the band, or placing stricter limits on the operations in this band."

The League said that no action should be taken until the FCC has studied the potential for interaction between AVM and wind profiler radar systems, the suitability of AVM operations for highway safety systems in a crowded RF environment, and the alternative technologies available for the same purpose served by AVM and Location and Monitoring Services.

In order to protect other users of this crowded allocation, the League said, the Commission should not expand frequencies available for AVM/LMS at 902-928 MHz but rather continue to limit such operation to 903-912 and 918-927 MHz.

And "in addition to [a] vast array of different users of the 902-928 MHz band," the League said, "the Commission is currently considering another user," namely wind profiler radars.

Band Use on the Increase

The League said that although amateurs have been able to share the band with AVM stations operating under interim rules since 1985 (when U.S. and other ITU Region 2 amateurs gained access to the band), since that time both amateur and AVM use of the band has grown.

Expansion of AVM/LMS in the band would "significantly reduce" its utility for amateurs at a time when they are increasingly looking to the band in the face of "intense growth" of Amateur Radio licensees and the "concurrent saturation" of the lower UHF and VHF amateur allocations.

"The continued availability of the entire band for amateur use is critical," the League said, especially in accommodating weak-signal propagation experiments and the development of amateur television.

The League noted that when the FCC reallocated 220-222 MHz from the Amateur Service to commercial users in 1991, it, the FCC, emphasized the continued availability of 902-928 MHz to amateurs. To significantly reduce the utility of 902-928 to amateurs by adding yet another service within it "would constitute a breach of the Commission's previous assurances to the Amateur Radio Service" and would "ill serve the public who benefit from amateur radio," the League said.

Saying that the Commission in its proposal already had established an intention not to place stricter limitations on current users of the band, "the Commission must, by the same token, avoid rules which would, *de facto*, reduce the availability of the band for those users, or to make sharing significantly more difficult than it is at present."

Finally, the League said that while amateurs (and others as well) have been able to share the 902-928 MHz band it is obvious that all services in a frequency-sharing environment must be "extremely robust" in order to survive. The League said that the constitution of the 902-928 MHz band had been essentially unplanned, and that its users must be able to accept significant amounts of interference and to "operate with the flexibility that such an interactive RF environment demands."

The League said it appears unclear that AVM technology is suited to such an environment.

The reply comment date for this NPRM was July 14, 1993.

- The ARRL Letter, 7/10/93

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The Computer Corner

By Stan Kaplan, WB9RQR
11541 North Laguna Drive
Mequon, WI 53092-3119

Here is the second in the series of articles on computing and computers, always from the point of view of use by hams. This time, let's consider floppy disk magnetic properties. Currently, 4 basic types of floppy disks are in wide use (though a 5th type is on the horizon, we won't consider it now). These are all double sided, and include:

360 kilobyte (360k) Double Density 5-1/4 inch

1.2 megabyte (1.2M) High Density 5-1/4 inch

720 kilobyte (720k) Double Density 3-1/2 inch

1.4 megabyte (1.4M) High Density 3-1/2 inch

So, basically there are two physical sizes, each of which has a double and a high density version. Let's consider 5-1/4 inch floppies first.

Which is more sensitive - the floppy which holds 360k or the one that holds 1.2M of data? If your answer was the 1.2M version, you are **WRONG!** When considering the strength of the magnetic field needed to record data, the 360k

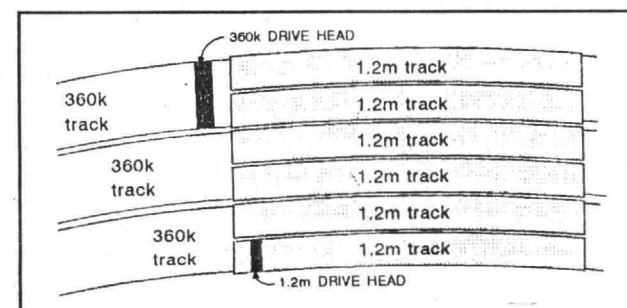
version needs a 300 oersted (the oersted is a measure of the strength of a magnetic field, just like the henry is a measure of the strength of inductance). The 1.2M version needs double the field, 600 oersteds, to record a byte of data! Therefore, because it needs a higher strength field, it is **LESS** sensitive, and the plain old garden variety (360k) is **MORE** sensitive because it needs a lower strength field to write data on it. Now, this has some very important implications.

The second consideration is the drive that writes on the floppy. Once again, there are differences. The heads in a 1.2M drive writes a very narrow (0.155mm, to be exact) but powerful (600 oersted) track, while the 360k drive heads write a less intense (300 oersted) but wide (0.300 mm) track. See the difference? Almost double. Furthermore, the 1.2M floppy has 80 tracks written by the drive, while the 360k has only 40 tracks. In summary, there are 3 major differences between these two floppy formats: 1) number of tracks; 2) width of each track; 3) amount of magnetic field needed to write a spot on the disk. Actually, there is also another difference - in the physical thickness of the disk.

Now let's consider compatibility. If you format a 360k disk in a 360k drive, then write data to it, can a 1.2M drive read it? Yes. No problem. The 1.2M read head is much narrower than the 360k track on the floppy, so it can respond properly to the magnetic domains that are present in the disk. An analogy is two differently formatted phonograph records, one whose tracks have been cut 0.3mm wide and one with tracks cut 0.155mm wide. If you

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play back the 0.3mm record with your phonograph that has a 0.155mm needle, there is no problem, because a 0.155mm needle will easily fit in a 0.3mm groove.

The opposite is not true. A 360k drive head is much too wide to properly read a 1.2M disk, because of two factors. First, the track is much too narrow to transfer a signal to the 360k head. Second, the tracks are too close together (1/96 of an inch apart, versus 1/48 of an inch apart in a 360k floppy), so that more than a single track at a time may be under the head! Not good for accurately sensing the data! This is all easier to visualize if you look at the figure below.



Perhaps now you are getting a feel for why it is **DANGEROUS** to interchange different types of disks. The next article will make this more explicit, and will outline what you can get away with and what you can not.

Reprinted, by permission, from the *ORC Newsletter*, Ozaukee Radio Club, PO Box 13, Port Washington, Wisconsin 53074 (Ron Yokes, W9-BCK, Editor). □

Chasing the Great Circus Train



Every year in early July, the Great Circus Train carries a spectacular cargo from Baraboo to Milwaukee. On more than 20 flatcars are dozens of authentically restored, colorful circus wagons which are pulled by teams of draft horses in the Great Circus Parade on the following Sunday. Amateur Radio rides the train to provide emergency communications and to let all listening know where the train is along its route. Since this year was the first year of a new route, two Madison-area hams helped the chase crew find and follow the roads which would keep the chase vehicle closest to the train. The 1993 route was from Baraboo to Madison, then to Portage, where the train waited for day two of its trek. On day two, it was Portage to Milwaukee. Shown in the photo are, left to right, Kate Kedney, KA9MWT, chase car communicator; Lloyd Gorsiske, WB9RGO, Racine, chase car driver; Lloyd's wife, Bev; Bill Klinkner, N9KXX, Sauk City, who stopped to say hello; chase car guide Jim Waldorff, KB9AQQ, Madison; and a friend of Jim's. The other chase car guide was Paul Amend, KA9OBP, of Rio. Special thanks to Jim and Paul for checking out the chase route and helping on train day, and to Don Evenson, K9JYX, Baraboo, and Ken Ebnetter, K9EN, Portage, for providing large, well-detailed maps for Lloyd and the guide vehicles. Amateur Radio operators aboard the train were Jack McLeland, W9ATK; Bob Goldstein, K9KJT; and Tom Kucharski, KA9EWJ.

ARRL Director Resigns

ARRL Dakota Division Director Howard Mark, W0OZC, has resigned due to an impending move to another ARRL Division. His resignation took effect July 18. Per the ARRL bylaws, Dakota Division Vice Director Rick Whiting, W0TN, assumes the office of Director for the remainder of Mark's term, until January 1, 1994. ARRL Southeastern Division Director Frank M. Butler, Jr., W4RH, has been appointed by ARRL President George Wilson, W4OYI, to replace Mark on the ARRL Executive Committee for the remainder of Mark's term.

- ARRL Bulletin B077, 7/21/93

Mixing Does Not Match

By Ronald W. Hooker, K9WTF
S68 W22700 National Avenue, Big Bend, WI

I deal with both true IBM personal computers, and the IBM compatible type personal computers. There are some differences which can cause issues if you are not aware of them. The disk operating system, or DOS as it is commonly referred to, is made by Microsoft for both the true IBM and the compatibles. The DOS for IBM is called "PC-DOS" but the DOS more commonly seen is called "MS-DOS." You should not mix the files from these two operating systems. Just like you should not mix files from one DOS version to another DOS version (i.e. MS-DOS 3.3 to MS-DOS 5.0). Strange, unpredictable things can occur when you mix files from PC-DOS with MS-DOS! To prevent this occurrence, my best advice is to **always** make additional copies of the DOS you plan to use. Use the diskcopy command and the original DOS diskette. The original should be write-protected when you do this operation.

There is also an issue if you want to change from one DOS to the other DOS on a hard drive. I recently wanted to change a hard disk drive from PC-DOS 3.3 to MS-DOS 3.3. The first step in this process is to boot the computer in the DOS you want to change to from a floppy. The "SYS" command is then used to copy the hidden system files onto the hard drive. Here I received an error message telling me there was not sufficient room to make the transfer. This is because on DOS systems before DOS 5.0 the two hidden system files had to be on adjacent blocks. A method around this is available with the correct utility program. Norton Utilities version 6.0 contains a utility to allow this change. This utility was not available on version 4.5 of Norton, and I do not know if it is available on version 5.0 or not. Once the hidden system files and the command.com file are transferred to the hard drive, then the rest of the DOS files on the hard drive should be deleted. Next you copy the files from the new desired DOS into the hard drive DOS directory.

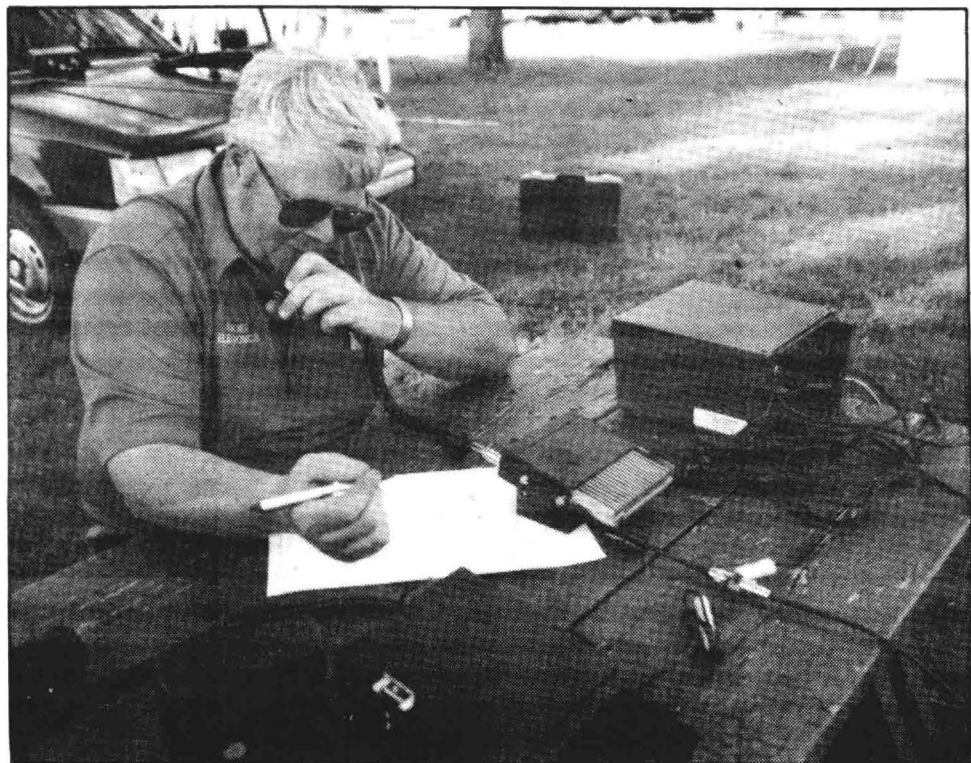
Another anomaly with IBM machines is how they treat 3.5 inch floppies in the media formatted size compared to any other machine's 3.5 inch floppies. These floppies have a rectangular slot on the right side of the floppy to designate that it is a high density (1.44M) floppy. If the slot is further forward on the floppy, this designates it as an extended density (2.88M) floppy. IBM does not employ sensing to detect the media size of the floppy while all others do.

I did a diskcopy of a 720k floppy (no slot) onto a 1.44M floppy on my IBM machine at work. The floppy was copied as a 720k floppy and readable on the IBM machine. Then I took this floppy home and was not able to read it on my machine. After some thought, I remembered that the original was a 720k floppy. So I took a write-protect tab and blocked the slot on the right side of the floppy. Then I could read correctly the floppy on my machine. This methodology provides an out for you in using a write-protect tab if done on a high density (1.44M) floppy. There is a hidden trap that is not as easy to overcome. My leased IBM was recently upgraded and it has a 2.88M 3.5 inch floppy drive. The trap is formatting or doing a diskcopy at 1.44M on an extended density (2.88M) floppy. Since the slot on the 2.88M floppy is further forward on the diskette, other machines will detect this floppy as a 720k diskette on a 1.44M drive; or will detect it as a 2.88M floppy on a 2.88M drive. The only way out from this is to make a hole in the proper location so that it can be sensed as a 1.44M diskette. To prevent this, when doing a diskcopy on an IBM machine, my advice is to make sure that both floppies are of the same density. Also, you should always format the floppy at the correct density for the floppy media size.

(This article first appeared in Hamtrix, the club newsletter of the West Allis Radio Amateur Club.) □

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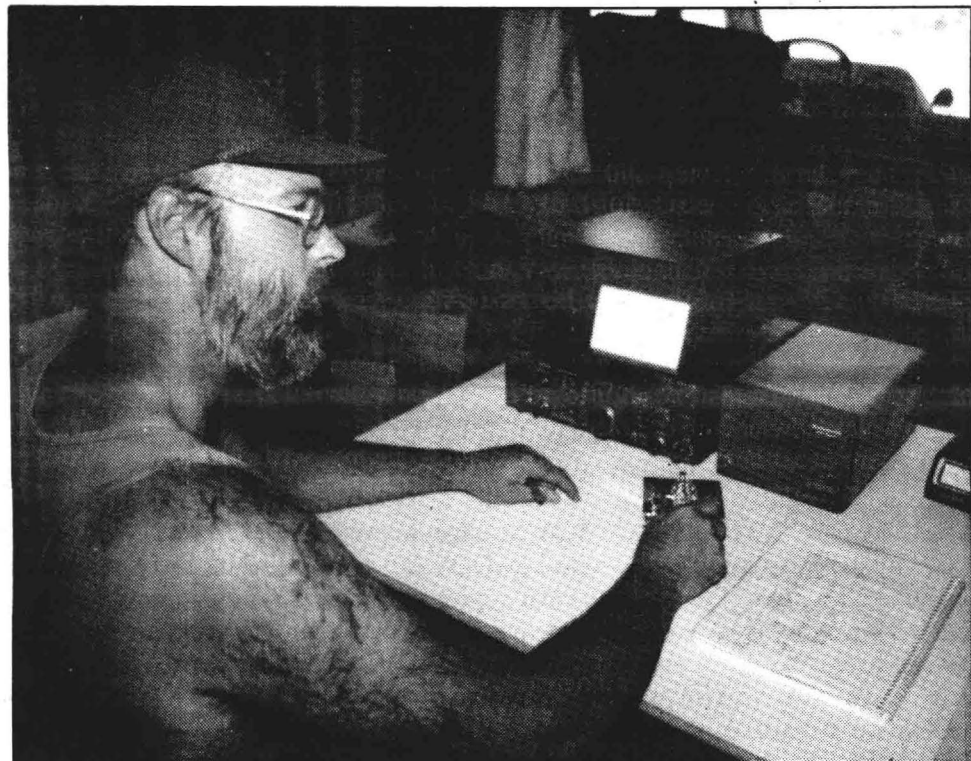
Class 3A, Plus Packet, Others • Owen Park, Columbia County, Wisconsin



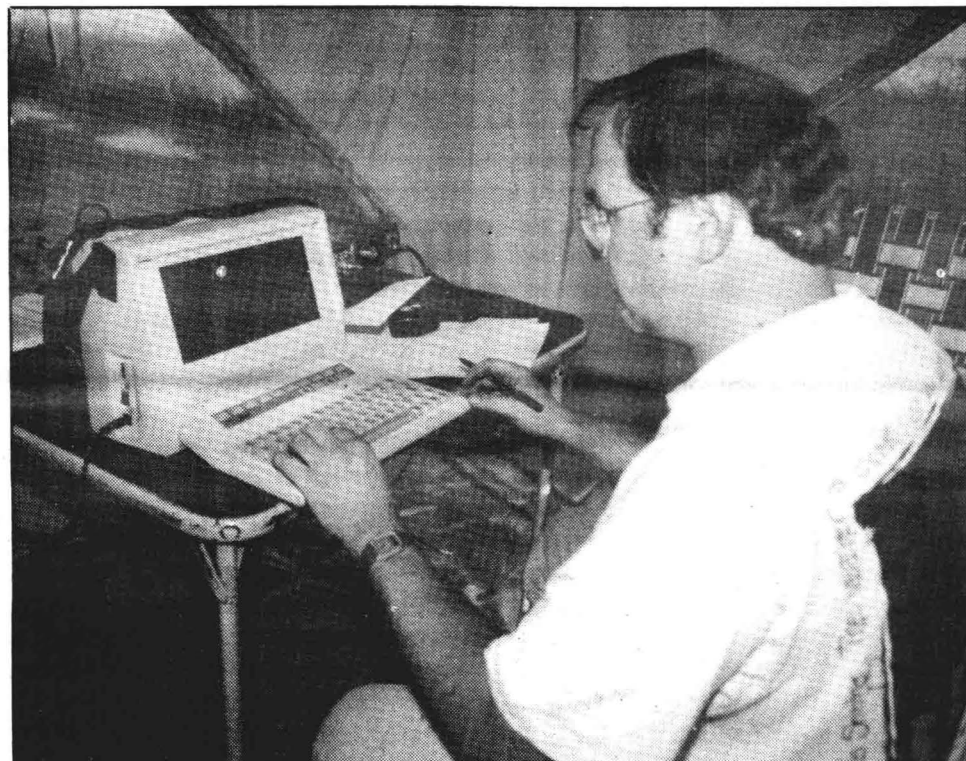
Bill Klinkner, N9KXX, Sauk City, belted out contacts on 2-meter FM. The 500+ feet elevation of Owen Park helps VHF more than a little!



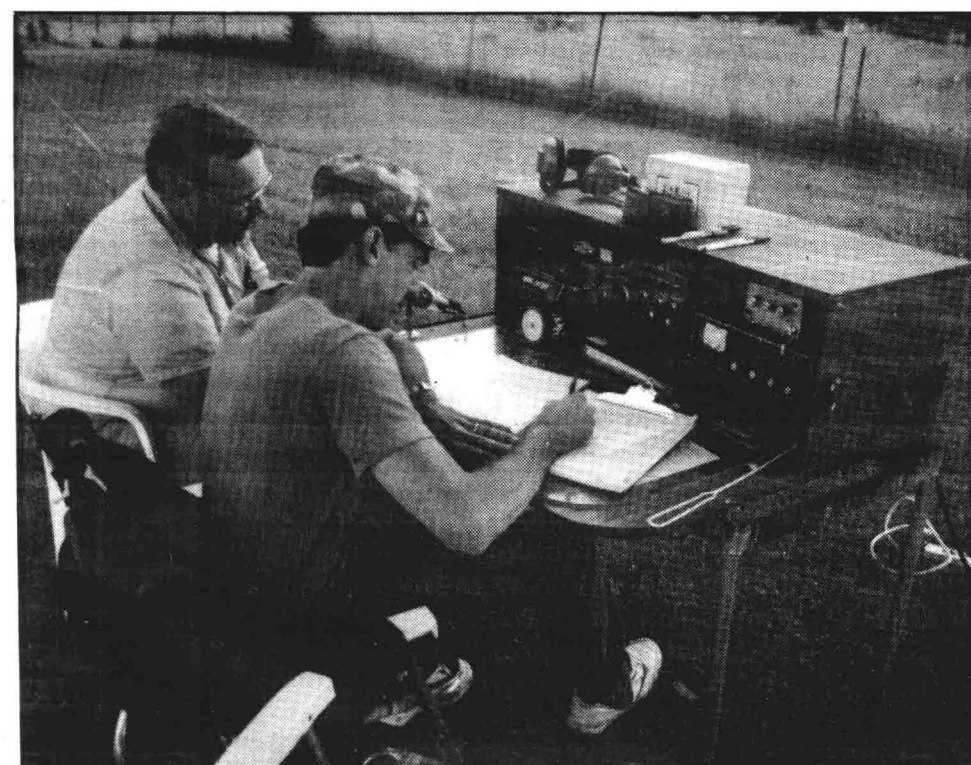
Steve Schwoegler, WB9RNL, Wisconsin Dells, found that a combination of speaking loudly and careful enunciation got the club's call sign through the QRM on HF SSB.



High-speed CW is the only way to go for Bob Sauvin, WT9Q, Sauk City. He had the QSOs piling up in a hurry, even at 50 or so WPM.



Rick Binks, KE9TP, a visiting op from Lombard, Illinois, worked packet from WB9FDZ. From the good VHF QTH of YTARC's Field Day, he even worked a friend back home.



Pete Sweeney, WD9JIB, Reedsburg, and Mark Snyder, N0MVV, North Freedom, joined the phone fracas from this outdoor operating position.

- BSSS staff photos

New Products

AEA SWR-121 ANTENNA ANALYST

Lynnwood, WA - AEA has recently introduced the SWR-121 hand-held Antenna Analyst. The Antenna Analyst provides comprehensive antenna performance information in an easy-to-read graphic format. The unit has an LCD spectrum display which gives a visual SWR curve of any HF antenna.

Rod Proctor, President of AEA, said, "The objective in designing the Antenna Analyst was to give our customer a visual indication of the performance characteristics of any HF antenna. This will allow our customer to make adjustments and maximize the entire performance of their HF station, from the antenna to the feed line."

Frequency coverage of the Antenna Analyst is 1 MHz to 32 MHz, and it has an SWR range of 1.1 to 65.1. Frequency and display width adjustments are all controlled via the key pad on the front of the Analyst.

A useful feature of the Antenna Analyst is its ability to tell the user if their co-ax is up to specification. It does this with a return/loss measurement which is displayed on the LCD readout.

The Antenna Analyst is housed in a compact, well-designed case and measures 4.3"W x 2.25"H x 8.5"L, and weighs 1 lb., 10 oz. The Antenna Analyst can be powered by AA batteries or with a 12-16 VDC source. For battery conservation, the unit has a built-in battery saver.

An innovative feature designed into the Antenna Analyst is a serial port. This allows the Antenna Analyst to be controlled from a computer. With the optional software, SWR.COM, you can store an SWR plot obtained by the Antenna Analyst, and download it to your PC for later reference and/or comparison.

The SWR-121 Antenna Analyst is priced at \$399.00 (sugg. retail), and the optional software, SWR.COM, is priced at \$75.00 (sugg. retail). Both products are available from your favorite Amateur Radio dealer. The SWR-121 Antenna Analyst and SWR.COM both come with one-year warranties.

For more information, please contact Advanced Electronic Applications, P.O. Box C2160, Lynnwood, WA 98036, phone (206) 774-5554, FAX (206) 775-2340.

- AEA news release

September Special Event Station

Warrens, Wisconsin: The Monroe County ARC will operate KA9ETH 1400-2200Z Sept. 25; 1400-1900Z Sept. 26 to commemorate the 21st Annual Warren's Cranberry Festival. FREQUENCIES: 14.270, 21.370, and 28.370. For a Certificate, send a QSL and a 9 x 12 inch SASE to Marshall Kiel, N9FVU, P.O. Box 344, Tomah, WI 54660.

The writers, photographers, cartoonists, and others whose work you enjoy every month here in BSSS are, like the staff, volunteers. Tell them you enjoy their hard work!

American Radio Relay League Board Meets

The ARRL Board of Directors met in Windsor Locks, Connecticut, July 16-17. The following is a summary of the actions taken:

The Board adopted the recommendations of its Digital Committee, and, accordingly, will seek from the FCC regulations to permit semiautomatic digital operation below 30 MHz on frequencies authorized for data emissions, outside of the proposed new subbands for automatic operation. Bandwidth of digital transmissions of such operations would be limited to 500 Hz, and transmissions would be permitted only in response to stations under active operator control. Digital operators will be cautioned to strictly adhere to IARU band plans for digital operation. ARRL will develop, through its Digital Committee, operating guidelines for semiautomatic operation.

The League will also petition the FCC to seek relief from regulatory restrictions on HF digital operations to further the amateur service's ability to contribute to the advancement of the radio art.

The Board affirmed its commitment to have the League serve as the club and military recreation station call sign administrator on behalf of the FCC on an unconditional basis.

The ARRL Friendship Award was created to encourage friendly contact between radio amateurs and the discovery of new friends through personal

The League will publish a DXCC Yearbook to be distributed to active DXCC participants who are League members at no charge.

The League will petition the FCC to establish a lifetime operator license for the Amateur Radio Service.

A new Amateur Auxiliary Training Manual was approved by the Board, subject to the receipt of an updated memorandum of understanding between the ARRL and the FCC.

In response to a recommendation from its Industry Advisory Council, the Board stated its support for the concept of plug-to-plug compatibility between Amateur Radio equipment.

The Board accepted DXAC-recommended DXpedition operating practices and urged their widest practical distribution.

The Board committed League support for the FCC efforts to implement electronic filing of license and upgrade applications. The General Counsel was directed to file comments opposing any attempt by any authority, other than FCC, to provide a point-of-examination temporary operating authority.

The Board endorsed the concept of an international Amateur Radio permit, similar in nature to the international driver's license. It urged that the foundation be laid for the submission of a proposal to create such a permit to a future ITU conference.

A new Spectrum Management Committee was created to address changes brought about by new technology.

The Board affirmed its policy of seeking expansion of the 20-meter band from 14.350 to 14.400 MHz.

Chris Anziano, KD1OX, was selected as the recipient of the Hiram Percy Maxim Memorial Award for 1992. James McCauley, AB6EU, won the Excellence in Recruiting Award.

The Philip J. McGan Silver Antenna Award was awarded to Gary Pearce, KN4AQ. The award recognizes excellence in public relations.

The Board bestowed the Technical Excellence Award for 1992 upon Kenneth Macleish, W7TX, for his article, "Why an Antenna Radiates," which appeared in the November 1992 issue of *QST*.

James Stafford, W4QO, was picked as the Herb S. Brier Instructor of the Year. Robert Murais, KC1IV, won honors as the Professional Teacher of the Year.

Field Organization Volunteers of the Year were recognized by the Board.

The Board commended the SAREX Working Group, the Johnson Space Center Amateur Radio Club, and the participating astronauts for SAREX efforts.

The Headquarters staff was commended for its efforts in eliminating the DXCC backlog.

Watch for the full story in September *QST*.

- ARRL Bulletin 75, 7/18/93

"Business" Rule to Change

The FCC has amended its rules to allow amateur operators more flexibility to provide communications for public service projects and to "enhance the value of the Amateur Service in satisfying personal communications needs."

The new rules are based on a Commission proposal announced in a Notice of Proposed Rule Making in July, 1992, a proposal resulting from an ARRL request. The League, at that time, suggested that new language for the rules would permit amateurs greater flexibility in providing noncommercial communications while maintaining the traditional character of Amateur Radio by continuing to prohibit routine business communications.

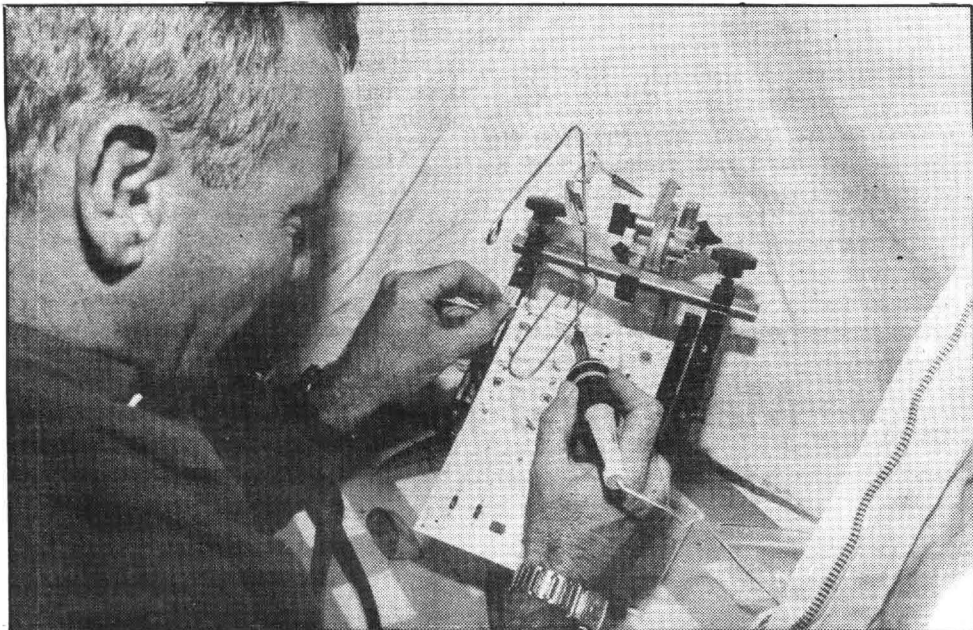
The Commission, in announcing the rules change, (in PR Docket 92-136) said the new rules would permit amateurs to "facilitate events such as races and parades, to support educational activities, to provide personal communications such as making appointments and ordering food, to collect data for the National Weather Service, and to provide assistance voluntarily even where there are other authorized radio services available."

The FCC stopped short of granting an ARRL request for further definition of acceptable communications, particularly in the difference between a regular and an irregular event, saying that providing such anecdotal examples "would necessitate that the FCC intrude upon the day-to-day functioning of the service to a far greater degree than desired." The FCC said that generating a list of the thousands of possible examples would unduly tax the Commission's staff.

The wording of the new rules is not yet available, and thus the new rules are not yet in effect. The full text of the FCC's NPRM is in September 1992 *QST*, page 62.

- ARRL Bulletin B079, 7/21/93

His Soldering Isn't Down-to-Earth



Astronaut Brian Duffy (N5WQW), aboard the earth-orbiting space shuttle Endeavour on mission STS-57, handles a soldering tool for an experiment in which a crew member soldered 45 connection points on a printed circuit board, and then de-soldered 35 points on a similar board. The soldering experiment (SE) was part of a larger project called the Tools and Diagnostic Systems (TDS). Sponsored by the Space and Life Sciences Directorate at the Johnson Space Center, TDS represents a group of equipment selected from the tools and diagnostic hardware to be supported by the Space Station program. TDS was designed to demonstrate the maintenance of experiment hardware on-orbit and to evaluate the adequacy of its design and the crew interface. Duffy and five other NASA astronauts spent almost ten days aboard the spacecraft in late June, supporting the SPACEHAB mission, retrieving the European Retrieveable Carrier (EURECA), operating SAREX, and conducting various other experiments.

- NASA photo

A Ten-Million Dollar-Plus Rain



In dryer summers, farmers often hope for rain to keep their crops growing. When those rains do come, they are often called "million-dollar rains." On the evening of Saturday, July 19, 1993, the North Freedom and Baraboo area got a rain which will cost more than ten million dollars. That's the current estimate to repair damage to roads, highways, bridges, and private businesses following extremely heavy rain which caused flash flooding. One electronic rain gauge registered more than thirteen inches of rain in a little more than two and a half hours. Railroad tracks were washed out near Devils Lake. The photo shows autos damaged or destroyed about a half-mile north of Devils Lake by a huge wall of water, estimated by various people at between eight and eighteen feet high. Creeks became rivers which became oceans. And mud slides, which I had thought were pretty much a California phenomenon, did tremendous damage as well. Since this event has been well-covered in the real news media, we won't go into much more detail, except to tell you that the Baraboo River had very little connection with the flash flooding; it was creeks and even highways which turned into dangerous and deep torrents of rushing water. Your BSSS editor does have a couple of observations, however. I have seen National Guard troops in the media helping other communities following flooding and other disasters, but never did I think I would see them here in BARABOO. But they are here, helping rebuild those roads, highways, and bridges, pump out basements, and haul huge loads of trash which had formerly been household furnishings. The damage was incredible, to say the least. One 12-year-old boy from Illinois was killed when the vehicle in which he was riding drove into a chasm where Highway 113 had been; he was swept away by what had been a small creek. His brothers survived. One mile of that highway no longer exists; work is progressing on rebuilding it. (That highway was the one on which we take this paper to the printer.) That only one person died was, in an odd way, a miracle in itself. We are no longer in a state of emergency as this is written, eight days after this event, so life is pretty much back to normal. As an often-heard phrase goes, "...it happens...". The next time we hear a flash flood watch or warning, we will pay a lot more attention because, this time, it happened right here.

- Photo courtesy of the News Republic

Please Support Congressional Pro-Amateur Radio Bills

As of June 14, 1993, eight U.S. senators and 37 representatives had become co-sponsors of the Amateur Radio Joint Resolution (S.J. Resolution 90 and H.J. Resolution 199). Please help get these resolutions passed. Send a well-thought-out letter, or just your QSL card, asking support to your senators and representative. Wisconsin senators are Russ Feingold and Herb Kohl, Senate Office Bldg., Washington, D.C. 20510. Representatives: House Office Bldg., Washington, D.C. 20515.

Clubs and Organizations

Taylor County Area Amateur Radio Club

Bernard Jari, KA9WDX, Secretary

W3159 Hanley Lane • Medford, WI 54451-9689

TAYLOR COUNTY AREA AMATEUR RADIO CLUB MEETING ANNOUNCEMENT

The next regular meeting will be held on Thursday, August 5, at 7 p.m. in the Emergency Government meeting room/Red Cross office, located in the basement of the sheriff's annex to the Taylor County Courthouse, on the corner of 2nd and Ogden Streets in Medford, WI. Talk-in will be on the 147.750/147.150 repeater.

MEETING MINUTES JULY 1, 1993

The meeting was called to order at 7:17 p.m. by N9GEN. Attending the meeting were KB9BLV, WD9FWP, N9GEN, W9LEE, K9QVX, N9GHZ, KA9WDX, KB9IQQ, KB9IRP, N9UBR, and WA9YCT.

Since the minutes of last month's meeting were taken by N9GHZ, the minutes were read by him.

The treasurer's report was read by N9QVX.

The meeting minutes of last month's meeting and the treasurer's report were both approved as read.

OLD BUSINESS

None.

NEW BUSINESS

There was a discussion on Field Day. Thanks were given to all those who participated in any way. We were there mostly for practice, but were able to make 69 contacts. A lot of visitors stopped by, and we tried to answer any questions that they may have had. A few were hams, and made a few contacts for us also.

KB9BLV donated the use of his HF rig, along with an MFJ 6-band vertical. Brad Erickson, who was waiting for his call sign to arrive in the mail, also donated the use of his HF rig. KA9WDX donated the use of his 10-meter mobile and most of the 10-meter contacts were made on it.

N9GHZ had 2-meter packet set up for the packet contacts. Next year, we will try to get the City Park for use on Field Day 1994.

There was a discussion on what we should do with the members who show up on the list as not having their subscriptions to the *Badger State Smoke Signals* renewed for 1993. N9GHZ makes a motion to have N9QVX send out notices to all those members who show non-renewed subscriptions. N9GEN seconded the motion, and the motion carried.

There was a motion made by KB9BLV to temporarily take a break from the meeting to go out to the parking lot and take a look at the Sheriff's Department's Emergency Communications Command Post bus that was donated to them by Bauer Trucking. The motion was seconded by N9GEN, and the motion carried.

After the discussion on the Command Post bus, the meeting was reconvened back in the meeting room.

The next topic of discussion was on the use of the autopatch. It was observed on the evening of June 22, 1993 by KA9WDX at 10:14 p.m. that someone was sending 5 - 6 touch-tones transmitting on our repeater input frequency of 147.750 MHz. Part of those just happened to be the access code to our repeater. KA9WDX then observed the individual transmitting three more tones. Those tones were 911. The 911 operator answered and there was silence. The 911 operator stayed on the line for quite some time, maybe about 30 seconds after stating hello. The operator then hung up. KA9WDX asked if anyone needed any help and then identified himself. There were about five seconds of silence, then 5 - 6 more tones were heard. The phone line was accessed again and then three more tones were entered. KA9WDX then entered the disconnect code. The individual was not heard after that.

It was unclear whether or not this was intentional at the time, but on the ARES net, which is held on Wednesday evenings at 8:30 p.m. local time on the 147.750/147.150 repeater in Medford, N9UBQ stated that there were six phone calls within a short period of time made to 911 from our phone line on that evening. There was a band opening that evening, and there was some noise on the individual's signal. But, since there wasn't any identifying, it appears as though it was intentional. Due to this, N9GHZ has printed an update of Rules, Regulations and Guidelines for the use of the autopatch, and passed them around at the meeting. N9GHZ went over the handout, and a discussion followed.

N9GHZ makes a motion to change the access code, and to add digits to the code in order to make it harder to discover what the code is. The motion was seconded by

WA9YCT, and the motion carried. N9GHZ makes a motion that we adopt the autopatch procedures that he had given us in his handout. The motion was seconded by KB9BLV, and the motion carried.

(Since the meeting, on Sunday, July 4th, I, KA9WDX, observed someone sending touch-tones on our repeater around 10:45 p.m. The party sending them was unsuccessful in bringing up the autopatch!)

The last topic of discussion was on Skywarn. WA9YCT had a presentation on this. He stated that he was designing Skywarn stickers and wallet-sized cards and showed us one of them.

N9GHZ makes a motion to adjourn the meeting. KB9BLV seconds the motion, and the motion carried.

The meeting was adjourned at 8:19 p.m.

Respectfully submitted:
Bernard L. Jari, KA9WDX

KEY TO CALLSIGNS USED IN THE MEETING MINUTES

Name, Call Sign, and City/Town

Tom Hrdina, N9GEN, Gad
Bob Braun, KB9BLV, Dorchester
Ernest Mehner, WD9FWP, Dorchester
Roland Walty, W9LEE, Westboro
Joanne Lundgren, N9QVX, Sheldon
Mike Schoenfuss, N9GHZ, Abbotsford
Bernard Jari, KA9WDX, Medford
Larry Williams, KB9IQQ, Medford
Aaron Williams, KB9IRP, Medford
Les Laub, N9UBR, Medford
Cliff Steevens, WA9YCT, Medford
Roland Sacho, N9UBQ, Medford

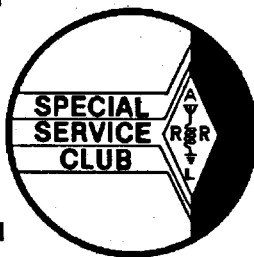
1993 TCAARC OFFICERS

Tom Hrdina, N9GEN, President
Bob Braun, KB9BLV, Vice-President
Bernard Jari, KA9WDX, Secretary
Joanne Lundgren, N9QVX, Treasurer

Riverland Amateur Radio Club

Dick Low, K0JYB,
Secretary

Club mail address: P.O. Box 621
Onalaska, WI 54650



MEETING MINUTES JULY 6, 1993

The July meeting of the Riverland Amateur Radio Club was called to order by President Bob, N9LZK, at 7 p.m. There were 31 people in attendance. Visitors were Greg Stetzer (a prospective ham), Bill Pike, K9FYZ, and Lisa, granddaughter of Walt, AA9AW.

The reading of the minutes was dispensed with pursuant to a motion by Feroz, WU9N.

The treasurer's report was given by Duane, W9HWQ, and accepted as read.

COMMITTEE REPORTS

SWAPFEST: Judy, N9LGV, reported that the date for the Swap Fest will be August 28th, 1993, at the activity building on the Onalaska American Legion grounds on Sand Lake Road. The Antique Radio Club will be doing some advertising for us. There will also be ads placed in the Radio Shack stores in town, and ads have been sent to surrounding ham clubs in the area. We need volunteers to help collect admission and table fees. The Antique Radio Club is going to be running a raffle to help defray their costs.

440 REPEATER: Kent, W9LZQ, reported that the fund raising progress is very slow, and they are still looking for additional donations. They still have first aid kits for sale, and have caps coming which have the Riverland insignia on them. Kent has two UHF Motorola radios valued at \$75 apiece which he is going to

donate to the project. One radio will be used as a receiver, and one as a transmitter. The radios are donated with the understanding that if they are used for a project other than the 440 repeater, radio equipment of at least equal value or cash will be available for construction of the 440 repeater system. Price lists and literature on the controllers are available, and the committee will be reviewing that.

Dan, N9PZC, reported on the progress of the first aid kit sales. Another 50 kits have been ordered. Any donations to the project will be appreciated.

OLD BUSINESS

None.

NEW BUSINESS

JOINT PICNIC: Feroz, WU9N, reminded us of the joint picnic with the Winona club, to be held Saturday, August 21st at the Perrot State Park. Bring a dish to pass, bring your own meat, and the club will provide the usual stuff, such as condiments, paper plates, etc. A State Park sticker will be required on your automobile, otherwise a \$2.00 fee will be charged.

RECOGNITION: Dick, K0KTP, gave recognition to Walt, AA9AW, for his work on the 220 Newsletter for the past 12 years. Walt and K9XI, Art, in Chicago are retiring from the 220 Newsletter job. Bill Pike, K9FYZ, was praised for bringing the Packet Cluster to this area. The cluster operates on 223.42 MHz, and we are all

welcome to join the packet cluster group.

NEWSLINE AND RAIN REPORT: Walt, AA9AW, reported on the Newsline which runs on Sunday night and the Wednesday night RAIN report, which are on the .37-.97 Club repeater. He would like to consolidate some of that activity because of time considerations. Walt has also been airing a Monday night show to introduce it into the area. These programs are all down loaded from satellite broadcasts. Walt would like to do a Sunday night show for about 1 to 1 1/2 hours. It has a lot of news, including the Newsline and the RAIN report information. It also includes news on DXing, contesting, etc. Walt would like to put the hour long show on Sunday evenings on an experimental basis to see if people like it. The RARC has been given credit for sponsoring the show on the repeater. Walt would like to continue on with the show. K0KTP, Dick, moved that we try the new show on an experimental basis and evaluate it at a future date. The motion was seconded by Karl, KB9EQI. The motion carried.

AMATEUR RADIO WEEK END: Kent, W9LZQ, reported on the upcoming Amateur Radio weekend, to be held at

Riverside Park on October 10, 1993. The Club trailer will be there, as well as a variety of equipment to demonstrate CW, HF, Satellite, and Packet Radio. There will be banners, signs, and photos to attract the public's attention. We need help - please sign up!

FIELD DAY: Bill, KE9XQ, and Scott, KA9FOX, reported on Field Day. We had excellent help in setting up and tearing down the equipment, which is greatly appreciated. We had one HF transmitter plus the Technician station. We had almost 1400 contacts, which is about one a minute. The beam worked dandy, although we had a rotor problem, and the crank up tower worked great. Bob, N9LZK, was master chef, and the food was good. We also had a little blurb in the paper. Kent, W9LZQ, suggested a round of applause for all of the people who put out the effort.

Meeting adjourned at 7:45 p.m.

A slide show of past RARC events was presented by Rick, KV9U.

Submitted by
Secretary Dick, K0JYB

Mancorad Radio Club

John Meyer, NZ9Z, Secretary

P.O. Box 204 • Manitowoc, WI 54221-0204

The ManCoRad Club will not have regular meetings during June, July, and August.

To keep up on club news, check into

the weekly ManCoRad nets:

SUNDAYS: 10 a.m. on 146.61 MHz.

SUNDAYS: 10:30 a.m. on 3.965 MHz.

Did Someone Ask a Silly Question at Field Day?

Erecting antennae at Field Day can be a trying experience; even more so when someone asks a question that has an already obvious answer. To ready you for next year, here is an often-asked query and its reply. Q: Why are you pulling that wire? A: Did you ever try pushing one?



WB9QFW 2-Meter Repeater 146.07-.67 and Club Station

P. O. Box 847 • Plover, WI 54467

MEETING MINUTES
JULY 14, 1993

We came promptly to order at 1930 local time, as ordered by President Art Wysocki, N9BCA.

Scott Jasper, NE9U, gave the treasurer's report, and handed out detail information on all the income and expenses for the past year.

Lori Jasper, KA9ZGD, our swapfest raffle chairman, reported on this year's successful raffle results. The club offered our collective thanks and congratulations to Lori on a job well done. She just said, "Wait till next year!" Special thanks go to our top ticket sellers:

Rick Miller, NI9P	315 tickets
Ken Slusarski, N9SDW	240 tickets
Lori and Scott Jasper, KA9ZGD and NE9U	138 tickets
JoAnn and Ray Dix, N9NOG and KF9BG	90 tickets
Mike and Lara Pagel, KA9LAQ and KB9CRU	60 tickets
Jim Benak, KA9ACE	60 tickets
John Feltz, WA9LWJ	60 tickets
Dave Golla, N9OVT	60 tickets
Charlie Miller, WB9UMU	60 tickets
Joe Omernik, N9CGV	60 tickets
Art Wysocki, N9BCA	56 tickets
Gene Hamus, N9GEP	45 tickets

Other little known facts about the swapfest: there were 325 people attending, and it cost just over \$400 to UWSP to use the building.

Joe Larson, N9JW, gave the secretary's report. He received a card from the

ARRL saying that the exam paperwork from the swapfest was all in order and had been sent in to the FCC on June 24.

We also got a letter from the American Heart Association thanking us for our help during the bike races, an advertisement for Novice/Tech videotaped license classes from the ARRL, and a copy of the *ARRL Field Forum*.

The *Field Forum* was passed around, and we simply "passed" on the video tapes.

N9JW will be leading Novice/Tech classes again this fall, tentatively starting September 29 (Wednesday), and going for ten weeks. Class will include a Morse Code section again this year, and Frank Guth, W9BCC, has volunteered to teach the code. The next exam session in Stevens Point is set for December 4, 1993, a Saturday.

N9JW asked for club support again in pre-ordering a supply of books to have on hand for the class. The club approved. We can get them at a discount from the ARRL Instructor/Dealer program, make a dollar or two on them, and still offer them to the students at a discount over the cover price.

Art Wysocki, N9BCA, finished the swapfest report. The dealers were happy, especially with the 0600 hours volunteer help loading up, and tearing down later on. Sixty-two tables were occupied.

Ron Howe, N9JH, and Bob Baird, W9NN, had been appointed to find out what new repeater would fit our needs, and they came back with their report. The basic model of a Kendercom Mark 4 would fit, and would provide expandability in the future. The club treasury has just

about enough to cover the cost of the basic model, and the club voted some time ago to purchase a new repeater to replace our aging 146.985 system.

We voted again to approve the expenditure to obtain the basic unit as described by Ron and Bob. The plan is to replace the .985 system with this new model, fix up the .985 repeater and move it to the University and to 146.670, and keep the old .670 machine as a spare. The autopatch will move to .985. Look for changes on the air over the next weeks and months.

In a related announcement, Al Maliek, K9WVM, was said to be collecting pledges from anyone interested in contributing to a repeater upgrade fund. It will take about another \$1400 to upgrade the basic repeater to the full featured model, and Al is up to about \$400 already. Let him know if you would like to contribute, and how much.

W9BCC suggested that he could put together a list of club-owned equipment that is no longer in use, for possible sale or auction. This would be another good way to raise more repeater upgrade funds.

Mike Pagel, KA9LAQ, reported on Field Day. We made 516 QSO's for a claimed score of 1285 in class 1A. Mike commented on the exceptional turnout: there were two or three operators all night long, and lots of visitors and interesting conversation. Mike said he never knew all that about W9NN before.... We will try to go back to Schmeekle Reserve again next year.

KA9LAQ suggested we might put together an ad hoc nominating committee for club offices up for election next September. He, W9NN, and Mary Eiden, KA9FAS, will be that committee. They will try to put together a slate of willing candidates for all club offices before the September meeting. This way you don't have to be afraid you will be elected if you show up (or don't -- right Mike?). They will not be responsible for evaluating the quality of candidates, simply the quantity. If anyone would like to be considered for a position, let any one of these people know about it. Late additions to the nominating list will still be allowed.

KA9LAQ also noted that July 31 brings to an end the long and glorious career as a single man of KA9ACE Jim Benak. We all observed a moment of "silent well wishing" in honor of this upcoming event.

There will be no meeting next month. Instead, those inclined will gather at Bob Baird's house on River Road in Plover about 4:00 p.m. August 8, Sunday afternoon, for an evening of cooking out and swapping stories. The river has mostly gone back where it belongs, and you no longer have to walk through waist deep water to get to Bob's house. However, Bob says fishing is still excellent in the new swamp across the street.

NE9U asked that all the Plover members who are going through the Plover address changes get their new addresses to him:

We adjourned at about 2010 hours, and enjoyed a twenty minute slide show from Mike Eiden, WD9JID, of the 1978 swapfest and Field Day, and the 1984 and 1993 Field Day activities. Mike did his own processing of the 1993 slides, and they came out excellent. (Confidential to John Feltz, WA9LWJ: Ask Mike for some prints. He has some great pictures of you.)

ATTENDANCE

Joe Larson	N9JW
Art Wysocki	N9BCA
Frank Guth	W9BCC
Doc Rifleman	WA9N
Bob Baird	W9NN
Mike Eiden	WD9JID
Mary Eiden	KA9FAS
Mike Pagel	KA9LAQ
Loren Larson	N9SEA
Dave Golla	N9OVT
Frank B. Podach	N9JQR
Ron Howe	N9JH
Joe Omernik	N9CGV
Lori Jasper	KA9ZGD
Arielle Jasper	
Alex Jasper	
Scott Jasper	NE9U
Steve Kochanowski	KB9IIE

Respectfully submitted:

Joe Larson, N9JW, CWRA Secretary

Sheboygan County
Amateur Radio Club

Gregg Meschler, N9PZV, Secretary

2309 North 34th Street • Sheboygan, WI 53083

Since the June meeting for the Sheboygan County Amateur Radio Club is being held on Field Day the June minutes will be included with those for July. There are, however, some important announcements:

Nominations have been CLOSED and officers will be elected at the June meeting. Your new officers will be as follows:

President - Penny TenPas, N9TCF
Vice Pres. - Steve Meifert, KF9KZ
Secretary - Gregg Meschler, N9PZV
Treasurer - Al Martell, NF9R
Exec Board - Luiz Cordeiro, KA9HUF,
and Chris Jacobs, KB9IKQ

DUES WERE DUE JUNE 1. The club's fiscal year begins June 1st, so to ensure uninterrupted service of *Badger State Smoke Signals*, please have your dues in on time. Even if you don't want to be an active part of the club we depend on your support, not only for our repeater but for many other club activities and services. Many new hams got their start in a club sponsored class, and new materials will be needed this year if we are to continue. The club library is in need of some more contemporary reference books and materials. The membership has grown in the last year and we'd like to see it grow even more. Help support Amateur Radio on the local level - Send in your dues and encourage non-members to do the same.

The annual Bike Ride Plus went on as scheduled on May 15th. Thanks go to Penny, N9TCF; Al, NF9R; Ron, N9ITM; David, KB9GHE; Larry, WB9FXQ; Luiz, KA9HUF; Tom, AA9BJ; and Steve, KF9KZ, who provided communication along the course.

If there is enough interest, a VE session can be scheduled for sometime in August

or September. All of those who would like a shot at upgrading should contact Tom, AA9BJ or Steve, KF9KZ, on or before the July meeting.

Respectfully Submitted,
Steve Meifert, KF9KZMEETING MINUTES
JULY 13, 1993

The July 13, 1993 meeting of the Sheboygan County Amateur Radio Club was called to order at 7:00 p.m. by President Penny Ten Pas, N9TCF.

Penny offered a thank you to outgoing club officers and the 1993/94 officers were introduced:

President: Penny Ten Pas, N9TCF
Vice-President: Steve Meifert, KF9KZ
Treasurer: Al Martell, NF9R
Secretary: Gregg Meschler, N9PZV
Board Member: Joe Dufon, N9REH
Novice Rep.: Chris Jacobs, KB9IKQ

Penny asked all members and guests present, 17 in attendance, to introduce themselves.

The club secretary read the minutes of the previous meeting and the treasurer's report was read. Both were approved as read.

Volunteers were solicited for net control operator of the next month's 2 meter-net held every Monday evening at 7:00 p.m.

COMMITTEE REPORTS

Technical committee distributed a list of repeater control codes and answered questions regarding a remote receiver for the repeater. A remote is currently under

study, however, many parts need to be acquired, a frequency assigned and location determined.

Emergency Coordinator, Al, NF9R, passed out a revised club member list and a sign up form for emergency call listing.

OLD BUSINESS

A. June 26, 27th - Field Day: A great success with 2730 QSO points. The club set up four simultaneous stations operated over the 24 hour period with the help of over twenty helpful hams. Thanks to the following:

AA0NG (Ex-WB9GLB), Kurt - Thanks for donating yagi tribander.

N9REH (Joe Dufon) - Aluminum Tent Stake Award. At times, his video camera was in the wrong place at the wrong time. Also worked UHF/VHF station, for more than 100 points.

KC9HT (Rod Freeborg) - Best Supporting Ham Radio Operator (supporting a tent that is) - Also worked All Band tent.

NF9R (Al Martell) - Misunderstood weather translator award ("slight drizzle with occasional gusts of wind." Obviously he's never seen the Wizard of Oz, we found some red ruby slippers outside of the tent when the storm left.) - also worked one important packet exchange for 100 points, and filled in for 1 hour on 20 meter ssb.

AA9BJ (Tom Hetzel) - Callsign Identification Award (Hey, I worked WE9R, did u get his report? Also worked a W4-A7Y8????). Great logging on 40 mtr CW. Quickest to take down a tent, of course, it never really was up. By the way, thanks for supplying the 40 mtr cw tent with a laptop, the rest of us appreciated it.

N9TCJ (Chris Meifert) - Best all around gopher. (Not necessarily by choice) - What would we have done if you weren't there to go back and get "just one more thing?"

N9SVV (Charlie Murphy) - Booger - Man (never knew a person that knew sooooo many booger jokes). Also supplied the Novice/Tech station with radio equipment, and support.

KD9SCX and KD9SCY (Francis and Charlene Goettle) - Best Husband/Wife Duo.

N9TBT (Rich Brown) - Best Phonetics - Whisko Echo Nino Rodeo - he likes his o's. Also stuck it out for the midnight to dawn shift on all band ssb.

N9KPK (Francis Goettl, Jr.) - Best Tuning Instructions. Also thanks to the Goettls for the use of their 530 in the all band tent.

N9HMR (Chad Christiansen) - Quickest Copy (Photocopying of log sheets that is).

WE9R (Lyle Ten Pas) - Fastest Copy of CW, too bad he can't write it as fast. Able to copy over 30 wpm, yet can only write 5 wpm.

KB9IKQ (Chris Jacobs) - Why did that guy send back KB9IKQGHE????, oops, I forgot to hit the send switch. Actually turned out to be a good cw op, if only he could remember what the station's call sign was.

KB9GHE (David Bahr) - No Dah-hhhhh!!!! After falling asleep at the log desk and quickly awaking (after 30-40 minutes) to say "Did I miss any action?" But seriously, he stuck it out the full 24 hours.

N9TBQ (Neil Hicks) - Great Logging Skills.

KA9HUF (Luiz Cordeiro) - Suck It In. His wife is gonna kill him for not sucking it in for the camera. Worked a little phone, and helped refresh our cw.

WB9FQX (Larry Bahr) - Best supporting dad. Great mug shot in the paper. Thanks for helping get some PR for the club.

KF9KZ (Steve Meifert) - Best Indiana Jones impression. Most CW QSO's. Finder of Field Day site, and best all around operator on and off the air.

N9TCF (Penny Ten Pas) - The other ops think they know her secret of talking in that southern belle accent. Most SSB QSO's, but how many dupes??? (only 2-8 total for the ssb tent).

N9PZV and N9TCK (Gregg and Mary Meschler) - Best fluid supplier, sorry that christening couldn't have been put off to another date, we missed the opportunity to work with 2 other good hams.

N9ITM (Ron Brey) - Best operator on the "Red Eye". How does he get invited to so many stag parties?

Please turn to page 16

Racine Megacycle Club

Arne Moxness, KA9ZPY, Secretary

3345 Newman Road • Racine, WI 53406

MEETING MINUTES JULY 12, 1993

The meeting was opened by President Dick, W5ONL at 7:30 p.m. All Hams introduced themselves. Approx. 25 Hams were present.

The Minutes as presented in the *Badger State Smoke Signals* were approved with minor corrections. (Nice job Dave, AA9HL).

Treasurer, Dave, AA9HL (formerly WB9ZIO), gave a report on the income and expenses which was approved. New balance is \$526.44.

OLD BUSINESS

Dave, AA9HL, reported on the By Law changes. About 75% mailed back the votes and most of the changes were approved with a large margin.

Dennis, WB9SVM, reported on the Field Day. Some 1300 contacts were made on CW and over 900 contacts on SSB.

There was a problem with the Swan rig. It would not receive on 20 meters. Also, the faithful generator gave out so an emergency generator had to be "plugged" in. The problem with the old generator is probably in the carburetor. This per Gary, N9MJH.

In behalf of the Club I would like to thank Jim, KB9CCY, again for a nice job done in getting all in order for the 1993 Field Day.

NEW BUSINESS

President Dick, W5ONL, had some sad news. He will have to resign as President due to the acceptance of a new work assignment in Akron, Ohio, which forces him to move. Ultimately he hopes to get to Dallas, Texas where he has his permanent home (and wife and family). Dick was thanked for a nice job done. He will be missed. His expertise and long experience

in Ham radio has helped many and the club over the years. We now hope to hear from him on packet and CW or SSB now and then and who knows, maybe he will visit some day.

Larry, WA9JMO, invited the Racine Megacycle Club to his home for a picnic on August 22 together with the QCWA, as last year. He reported that there are some things in their pond that nibble on a baited fish hook. There is also plenty of room on their property for things like swimming (in the pond, bring life jacket if you can't swim, I think it is deep), boating (row boat), horseshoes, volleyball (not for me), etc. Everyone is to bring his own food and extra lawn chairs and card tables. Larry and his wife's property is located on the north side of 6-Mile Road just west of Hwy. 31. The picnic will be from 1 - 4 PM.

Dan, KA9OIL, reported on the last Fox Hunt (hidden transmitter). Winners were KA9OIL, KC9NG and N9JYC. Next hunt is July 23.

Gary, N9MJH, reported on the upcoming Racine Ham Fest. More on the details below.

It was suggested at the meeting that we should have an Awards Chairman. Dave, AA9HL, volunteered to be one.

Cheryl, WS9P, reported that Joe, N9FAU, has donated some radio-related equipment to Gilmore Junior High, which was greatly appreciated.

Cheryl also thanked outgoing President Dick, W5ONL, for a nice job done for the club and we all wish him the best for the future.

The formal part of the meeting was adjourned at 8:15 PM.

The program for the evening started with a very nice video taken by Don, N9HAM, which showed in a nutshell the Field Day from beginning to end.

Larry, WA9JMO, then took over and took us all to Russia again with the help of

float with his tractor. Penny will make her truck available for Chris to drive if the tractor cannot be used. Future Hams will be on float, Amy, Jenny, Carrie, Kelly, Russell. We have dutch costumes for all.

F. ARRL Special Service Club Affiliation will be sent in next week.

G. Volunteers are still needed for the following special events. Contact Penny, N9TCF:

Super Week-Bike Criterium is July 22nd, (Thursday).

August 28 - Heart Bypass Ride (at Lakeview Park).

August 29 - Brat Fry at Woodlake Mkt.

NEW BUSINESS

A. Fox Hunt - August 14th, 1993.

B. Plymouth Fire Dept. Parade was raised as possible club service. Declined due to date conflict with a previous club event.

C. Al - will make name tags to keep at the club with call sign and name. Please check list for your name preference, also check for accuracy of address, and advise if you are an ARRL member (for ARRL Special Service Club).

D. Need suggestions for future programs.

E. Official Notice - VE Session September 11, 1993, 9:00 a.m., Red Cross Building, 2032 Erie Ave., Sheboygan, WI. NO WALK-INS, register in advance. Contact: Tom Hetzel, AA9BJ, 1658 S. 26th St., Sheboygan, WI 53081. Phone 458-2307.

F. Tom, AA9BJ, would like to start a Elmer program. Elmers do not need to be high tech, just have a shack open once in awhile for new hams, especially from the test date to the receiving of the license. Tom presented a report which was very enlightening regarding on-air activity of the new Novices. Ref: Badger State Smoke Signals.

G. Penny presented the idea of a Special Event Field Trip before the field day.

H. Luis, KA9HUF, asked members to contact him regarding placing an order for personalized jackets with club insignia if

slides. Thanks again, Larry. It was Larry's and his wife's third trip and they are planning for another trip again. (Larry, please take some more slides!) Larry had taken some Russian souvenirs with him again, some we could keep! He did mention that his wife now has quite a collection of the well known stacking dolls and laquered boxes.

Larry is also trying to bring some Ham rigs, etc. to the Hams over there. If you have any old rig(s) or radio equipment you would like to donate please contact him. He has contacts and will arrange for the transportation of them there.

At the next meeting August 9 there will be a special election for a new President for the rest of the year. Anyone volunteering?

EXTRA - EXTRA - EXTRA - EXTRA
EXTRA - EXTRA - EXTRA - EXTRA

RACINE will have its very first HAM FEST and it will be a recurring event. It will take place at South Hills Country Club Saturday August 14. South Hills is located on West Frontage Road north of Hwy. 20 and will open for the public at 8:00 a.m., and will end at 2:00 p.m. It is all indoors, so the weather has no say-so. Dave, WB9USI, is in charge and has lined up a very elaborate event with many special attractions like model airplanes, several special radio set ups like packet, CW, 10 Ghz-Microwave, City of Racine 911 demo., law enforcements set-ups, etc. There will also be license upgrades run by Milwaukee Hams. For more information or printed flyers please contact the people listed below.

We are in need of MANY Hams (you get in free) to help in the various areas. Please contact Dave, WB9USI (554-7565), Cheryl, WS9P, Lloyd, WB9RGO (639-2041), Dave, AA9HL, (681-3208 for table reservations), Gary, N9MJH, undersigned, or any other involved Ham and offer your help. It should be quite an enjoyable experience and an honor to participate in this Racine's first

HAM CALENDAR

Courtesy Racine
Megacycle Club

Aug 8	.....	Hamfest at Peotone
Aug 9	.....	Megacycle Meeting
AUG 14	.....	HAMFEST
	.....	AT RACINE
Aug 14	.....	Hamfest at Sugarcamp
Aug 20	.....	Fox Hunt
Aug 28	.....	Hamfest at Onalaska

Sep 4	.....	Testing at Red Cross
Sep 4	.....	Fox Hunt
Sep 6	.....	Packet Group
Sep 12	.....	Hamfest at Joliet
Sep 13	.....	Megacycle Meeting
Sep 17	.....	Fox Hunt
Sep 18	.....	Hamfest
Sep 19	.....	at Peoria
Sep 25	.....	Hamfest
Sep 26	.....	at Grays Lake

Oct 2	.....	Testing at Red Cross
Oct 4	.....	Packet Group
Oct 10	.....	Hamfest at Waukesha
Oct 11	.....	Megacycle Meeting
Oct 15	.....	Fox Hunt
Oct 26	.....	Lakeshore Club

Nov 1	.....	Packet Group
Nov 6	.....	Testing at Red Cross
Nov 7	.....	Hamfest at Kaukauna
Nov 8	.....	Megacycle Meeting
Nov 12	.....	Fox Hunt
Nov 27	.....	Fox Hunt

Dec 4	.....	Testing at Red Cross
Dec 6	Packet Group
Dec 10	Fox Hunt
Dec 13	Megacycle Meeting

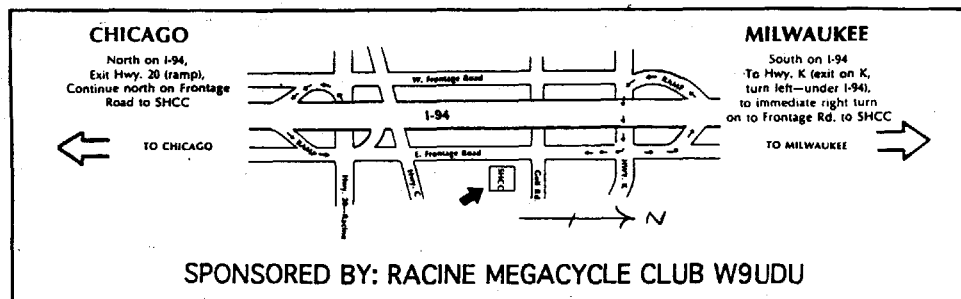
Jan 9	Hamfest at Waukesha
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Feb 22	Hamfest at Eau Claire
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Apr 10	Hamfest at Madison
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large Ham Fest.

Respectfully submitted:
Arne, KA9ZPY, Club Secretary



Sheboygan County Amateur Radio Club

Continued from page 15

KB9HQS (Steve Scheuren) - Best tower climber. What a brave soul to go up the tower to hang the delta loop the rest of us forgot to attach. Also helped to take down.

N9RCZ (Bob Stoneman) For rounding up a 5000 Watt Generator

Other Cast of Characters:
N9RVF and WD9DLI - Pat and Tony Udovich, for supplying card tables on short notice.

N9RCJ (Ron Hicks) Helped to set up.

N9TRK (Steve Billings) Helped set up.

WB9GTX and KB9AFT (Jack Douville and Rob Jacobson) - For advising a local ham of our field day activities and directing him to our site. (N9TYW)

K9JHK - For bringing the "Ark" to our site, along with the 2 wise men.

KB9AFT - For giving us a weather update, and gas station location after 9 p.m. As always a great monitoring.

Andy Houwers - for helping set up.

B. July 5th Parade-Thanks to Helpers:

Luis, KA9HUF	Joe, N9REH
Steve, KF9KZ	Fenny, N9TCF
Ron, N9ITM	Al, NF9R
Larry, WB9FXQ	Mei, N9TBQ
David, KB9GHE	Rob, KB9AFT

C. July 10th Leukemia Ride - Thanks to Helpers:

Tom, AA9BJ	Penny, N9TCF
Steve, KF9KZ	Rob, KB9AFT

D. Past Wx. Nets - Appreciate all who checked in, Net Control Operators, Steve KF9KZ, Rob KB9AFT and Emergency Coordinator - Al NF9R.

E. July 31st - Hollandfest (9:00-2:00 Parade Starts) Trailer for Hollandfest will be at Penny's QTH. Volunteers needed for making float. Chris Jacobs will pull the

Racine Megacycle Club Profiles

By Bill Komistra, W9OVZ • 5101 Graceland Blvd. • Racine, WI 53406

Club Ham - WW9A-Z

It was a beautiful day on June 25, 1876. The sun was shining with a cloudless day. Summer had just begun. Flowers were budding, birds were chirping, and vegetables were poking their sprouts through the garden surface. But, now the plot thickens. This was also the day that the Sioux and Cheyenne Indians wiped out the 7th Cavalry of Lt. Col. George A. Custer in the battle of Little Big Horn in Montana.

Now, let's go back a few years to June 23, 1868 to Christopher Latham Sholes of Milwaukee, Wisconsin, who received a patent for an invention he called a "typewriter." On one hand, there were cowboys (cavalry) and Indians "playing" with genuine, real bullets and, on the other, a technology that was to affect the lives of many other people - all in the same era. This invention was the forerunner of all keyboards for computers, CW, packet (packetizers, how would you like to operate your station with a straight key to put your computer in an "on" or "off" state?), et. al.

So much for the introduction.

No picture was available of CLUB HAM, and I think he is just as elusive as

interested call Luis at 457-4590.

The meeting adjourned at 8:00 p.m. for the following program:

Closing Program: Penny read her list of field day participants as she remembers (see above). Then to Joe's Field Day video, which was very revealing and en-

Bigfoot of the Himalayan mountains.

Now, the technical stuff. CLUB HAM didn't send me any information, so you don't get any, either.

In conclusion, I don't have any problems beginning and ending these profiles. The real problem is getting the information to put in between the beginning and end.

So, to all the RMC members who have the questionnaires: Please fill them out and see that I get them. I plead to you on bended knees. Nay, I implore you on bended knees and a kow-tow for good measure. Pu-leeze.

I had made a commitment to the club president, Dick, W5ONL, that I would do the Profiles to the end of the year. But I do need information to continue.

The year was 1866 when the first telegraph cable was laid across the bed of the Atlantic Ocean. So, long before any of us were born, the technology and world events that happened then are now influencing all of our lives. For better? For worse? It is difficult to say.

Until next month, 73, 88, 99, 1015, etc.

Respectfully submitted:
Bill Komistra, W9OVZ

joyable. Thank you Penny, N9TCF, and Joe, N9REH.

73, Gregg Meschler, N9PZV, Secretary

(We apologize for the omission of the Sheboygan club's material last month.)



Clark and Taylor County Area Amateur Radio News

CONGRATULATIONS TO....

© Brad Erickson of Stetsonville, who passed the exams to qualify for a Technician Class license on May 29 at the VE test session held at Tomahawk.

© Bernie Jari, KA9WDX, Medford, who passed the 20 WPM code test on June 16 at the VE test session held at Merrill. Bernie presently holds a General Class license.

© Jeff Parker, Loyal, and Tom Wegner, Neillsville, who both passed exams to earn Technician Class licenses on July 10 at the VE test session held at Marshfield.

OTHER NEWS

© Several more students from the Spring, 1993 Amateur Radio license course at Medford have received their licenses, as reported to me. They are as follows: Valerie Hamm, KB9IQN (on 6/8/93); Julie Prihods, KB9IQM (on 6/8/93); Les Laub, N9UBR; Roland Sacho, N9UBQ; and Aaron Williams, KB9IRP. They are all from Medford. N9UBR, N9UBQ, and KB9IQN have already been on two meters. N9UBR's first contact was on 6/21/93, and KB9IQN's first contact was on 6/26/93. Also, Neal Zuleger of Medford, KB9IQP, made his first contacts, on ten meters, on 6/26/93 at the TCAARC's Field Day site.

Clark/Taylor County Amateur Radio Emergency Service (ARES) News

By N9GHZ, ARES
Emergency Coordinator

Don't forget to try to check into the weekly ARES net, held Wednesdays at 8:30 p.m. on the Medford repeater (147.75 / 147.15). If the repeater is down or not functioning properly, alternate frequencies, in order, are: (1) Sheldon repeater, 145.47 (-600 offset), (2) 147.15 MHz simplex and (3) 146.52 MHz simplex. You're also encouraged to volunteer for net control duty for the net.

SPECIAL NOTICE

Everyone is encouraged to check the expiration dates on BOTH their Amateur Radio Emergency Service wallet membership cards AND their Taylor County Emergency / Identification cards. If either or both cards have expired dates on them, please send the cards as soon as possible to Mike Schoenfuss, N9GHZ, P.O. Box 401, Abbotsford, WI 54405, so that they can be updated and replaced. At the July club meeting, several members discovered their cards had expired, prompting this notice. If you do not presently hold either an ARES card or a Taylor County Emergency ID card, you will be contacted in the near future about obtaining one.

If any Clark or Taylor County area Amateur Radio operators assisted in providing communications for the 30-mile June Dairyfest bicycle race, held on 6/5/93 in Marshfield, please notify me as soon as possible so that I can include the information in my Emergency Coordinator's records and reports.

Four operators assisted in providing Amateur Radio communications for the 1-5-10K footrace, which was held at Gilman on June 12th. This was the first year that Amateur Radio communications services have been provided for this event. There was a total of 47 runners. Assisting with communications this year were the fol-

lowing: N9IFA, Lublin, following the last runner; N9MED, Lublin, net control station at the start/finish line; N9NDT and KB9HTX, Gilman, located at the first aid station.

1993 FIELD DAY REPORT

This year's Field Day activities turned out to be a success, although we still could have used a few more operators, and some of the needed equipment was not provided for until almost the last minute. We used the Medford Jaycees shelter building, located in the Medford City Park just south of Allmann Street, along the Black River. The building was well-identified with some banners, and provided easy access and adequate parking. It is also located just off Medford's "Riverwalk," which brought a lot of foot traffic past the building, too.

The weather cooperated as well, with the rain holding off, although it was a bit windy on Saturday. An information table with pamphlets and handouts on Amateur Radio was located inside the shelter. We had one HF station (but switched between using two rigs) and a two-meter voice and packet station.

My records show we made a total of 69 contacts: 6 HF CW; 56 HF SSB; 4 2-meter voice simplex; and 3 2-meter packet. Contacts were made with 28 different states, two Canadian provinces, one maritime, and one with the Virgin Islands. The callsign used was N9GHZ. We started setting up around 10 a.m. Saturday morning, and were on the air between 12 noon and 1 p.m.

There were many visitors as well, although most were already licensed ham radio operators. Most of the members of N9GHZ's last Amateur Radio license course were also there at one time or another. Visitors included WD9FWP; N9UBR; KB9IQM and family; Mark Mathison, Medford (not licensed); N9UBQ; KB9IQN and family; and WA9-YCT.

I would also like to take this opportunity to recognize and thank those who did assist us with making this a successful Field Day. My apologies to anyone I might have missed.

EQUIPMENT SET-UP: N9GEN, KA9WDX, N9GHZ, KB9BLV.

EQUIPMENT TAKE-DOWN: KA9WDX, N9GHZ, KB9BLV.

PROVIDED EQUIPMENT: KA9-WDX (10-meter rig, antenna tuner, ground rod, various station accessories); N9GHZ (power supply, packet TNC and computer, rope, tripod, 2-meter antenna, ext. cord, coax cable, banners, handouts); KB9BLV (2-meter rig, HF vertical antenna and mast / support, HF rig, HF dipole); Brad Erickson, callsign pending (HF rig); KB9IQK / K9IQJ (2-meter rig and antenna); WA9-ZCO (generator); and N9SDY (ground wire).

OPERATORS: KA9WDX, N9GHZ, KE9RV (Tomahawk), WD9ITI, KB9IQK, KB9IQJ, KB9IQL, and KB9IQP (made his first contact since getting his license).

At this time, I would like to give some special recognition to a few individuals who I feel put forth some extra effort to ensure the success of our Field Day operations this year:

KB9BLV, for providing the use of his brand-new HF vertical antenna. Bob also stayed overnight Saturday night at the site, from at least 11 p.m. until 6 a.m. Sunday morning, and made several other stops up to the site throughout the operating period.

Brad Erickson (callsign pending), for providing us with the use of his solid-state Icom HF transceiver. I think it really made the difference in our making the contacts we did.

N9FZD, for doing the legwork required to acquire the site for us.

Hope to see MORE of you at Field Day NEXT year! □

Northern Wisconsin Radio Club

- Since 1923 -

Steve Hart, KA9OMC, Secretary

Route 1, Box 54 • Knapp, WI 54749



The next meeting of the Northern Wisconsin Radio Club will be August 24 at the Peppermill Restaurant in the Thunderbird Mall in Menomonie. Meeting time is 7:30 p.m. Dan, K0DL, and Ken, K9-

IAG, will demonstrate and talk about direction-finding techniques.

Steve Hart, KA9OMC
Secretary

Hudson Science Teacher and All-Ham Family Visit Wisconsin Dells



Hudson, Wisconsin science teacher Gerald Larson, N9FXV, and his family visited Noah's Ark in Wisconsin Dells for the Jan and Dean concert on Father's Day. Gerry's application for a space shuttle QSO was approved by NASA astronauts, and a great contact, with excellent questions from students, took place with Ken Cameron, KB5AWP, aboard the Discovery in late March. With Gerry (at left) are his wife, Lori, KA9YRT; daughter Alesia, KA9YRU; and son Mike, KA9YRW. Mike was one of two student hams who handled ground communications with the orbiting spacecraft.

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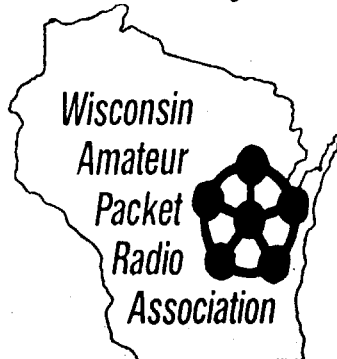
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From the Editor

✓ The Eau Claire Amateur Radio Club's minutes are not included in this issue. No information was received.

✓ Only two Field Day photos were received; they were too late for this issue. They will be printed next month. The Yellow Thunder Amateur Radio Club's pix were the only timely Field Day pictures we had. □



THE WISCONSIN PACKETEER

Wisconsin Amateur Packet Radio Association (WAPR)

William Schroeder, W9ZBD
4247 Forest Point Drive • Rhinelander, WI 54501

Steve Loeffler, WB9ZRE, Editor, 123 W. Oshkosh St., Ripon, WI 54971

WISCONSIN PACKET RADIO

This is plea to the majority of you who read this message: It is on behalf of Wisconsin's only state-wide packet association. We have made an effort to build a network in the last several years, and considering the very weak support from the active packeteers here we have had some successes. We have three paths across Wisconsin now. And we need to raise the speed on the southern-most between La Crosse and Lodi. If you bothered to read the treasurers report you know the situation. There's no free lunch and there's not much on the table either! We NEED YOU...if you are using a BBS provided FREE by a fellow HAM, which receives it's downloading from a network then you owe us all some help. If you have put nothing into packet, except for yourself, please at least JOIN W A P R now and give us a little encouragement and help. WE WANT YOU TO JOIN US!!

Bill W9NNS @ W9NNS.#CFL.WI.USA

WAPR 93-94 NOW PAYABLE

I hope you will JOIN WAPR by Sending your dues to the treasurer:

Ted Heilmann N9LLT
921 8th Ave.
Grafton, WI 53024

You are helping to maintain and expand a network that now joins Minnesota to Milwaukee with three paths. Expansion is VERY EXPENSIVE so it's a slow-go accomplishment. A new triple-node at Rhinelander to join the UP to Wisconsin and create an LAN is scheduled for completion this summer. We have great need of an INSURED CLIMBER to put the antenna on the WXPB tower at Sugar Camp. How about you? We need to raise the power to 100 watts at WIRAY node near Bayfield so that the link in 100% up to Thunder Bay. We need a 100 watt GE MAST II or EXEC II. Can you help? A new BBS is about ready to emerge in the Wausau area. And we pay rent annually for the node sites at Timm's Hill near Ogema and Meteor Hill near Exeland. Lacking these there would be no network in the northern half of Wisconsin. Please consider how much you are needed...and PLEASE HELP!

Bill Jablonske W9NNS @ W9NNS.#CFL.WI

**** Dues are still a bargain at \$15.00 ****

WIAUW FREQUENCY DEBATE

As most of you are aware, there have been proposals to change this Node from 145.01 to the local LAN of 145.63. I am opposed to this for various reasons. A few years ago we had all traffic on .01 and it got cluttered. We were asked to use LANs and assured that forwarding would be done on .01. Most sysops used the BP command to assure that users were restricted to the LAN freqs.

Various backbones were created on 6M, 220, 440 to interface with the .01 nodes to expedite things further. Speed increases on the backbones are envisioned to improve things even further and more backbones are envisioned. Now all of a sudden proposals are brought forward to require forwarding on a LAN which would be the result of changing the frequency at WIAUW.

Protests to this were raised in 1992 and we thought the issue was dead. The same proposal was raised in 1993 and it is just as undesirable now as it was a year ago. To implement this proposal would be a regression of what we have been striving for.

I urge others to speak out against this idea and ensure it is not implemented. We need to present a consistent design for this system of nodes, backbones, etc. There have been several years for the design to evolve and, in general, it seems to be working well as the pieces go together. There has to be a better way of accomplishing whatever is desired by this frequency change than to implement it. I urge others to make their opinions known on the subject either to me or preferably to the WAPR board.

Fine tuning will of course be required of the system. Major design changes should not be made without a thorough study of the consequences and alternatives.

Joel - N9BQM

LAPTOP-5 Terminal Program

LAPTOP-5 terminal program for MS-DOS and any TNC has just been released. This program is designed to allow extremely easy ASCII and BINARY exchanging of files from terminal to terminal or terminal to BBS and is so easy to use, a child could use it.

LAPTOP-5 supports the DFD BINARY and YAPP BINARY protocols.

Anyone wishing a copy of this program, send a S.A.S.E. disk mailer and (1) disk (any size) to:

N3DFD (Joe).
912 Ramona Ave.
Philadelphia, Pa. 19124.

LAPTOP-5 terminal software is made available to the HAM community absolutely FREE of charge.

Joe - N3DFD @ N3DFD.#PHILA.PA.USA.NA

"GRAPHICAL PACKET"

A Baycom Alternative for IBM

Graphical Packet version 1.50 is a fantastic software program! If I had to use this program with a full fledged TNC I would still be amazed with its usefulness and ease of use. Only a baycom style modem is needed and it works with a TNC in KISS mode or a DRSI modem if needed to suite. I keep on going back and forth from my Baypac modem to my MFJ-1278 to determine which is better and there just doesn't seem to be any difference so far as I can tell. Both operate better than the 1278 in its regular AX.25 packet mode.

I'm using Windows 3.1 with Graphical Packet running full screen in enhanced mode without any problems. Graphical Packet uses a program called TFCPR (command line "TFCPR -C2") to access the modem in KISS mode and TFCPX (command line "TFCPX -POOM2") to access the Baycom modem. -C2 and -POOM2 are COM port identifiers and could be designated as 1, 3, 4 if necessary.

The operator can use a mouse or keyboard - but the mouse makes it almost a hands free operation with its routing features. A built-in clock in the upper right corner of the screen features a beeper alarm to remind me of the time. The program is very usable even though the documentation is in German (the on-screen program is in English). Maybe an English version of the manual will be out by the time you read this.

A row of pushbutton icons on the bottom of the screen are as follows: mHeard, Edit, Setup, Monitor, DOS, Save, Load, Exit, Connect, Disconnect, mYcall, and a nice little spy button that lets you spy on up to 9 different QSOs at the same time. This last little feature works

great!

Up to ten connects can be made at a time and it has some nice file transfer abilities including binary.

The remote functions are nice but there are no mail commands, here's a list of the remote commands when turned on:

//<n> <Text>	: Sends a text to channel <n>
//Bell	: Calls Sysop by ringing a bell
//CATalog [wildcard]	: Shows a list of all readable files
//CUT	: Aborts a file transfer
//DElete	: Deletes a file, which is generated by //Write
//DIRectory [wildcard]	: like //CATalog
//DISConnect	: Fast Disconnect (without dismissal)
//Echo <text>	: Sends back <text>
//END	: Ends text saving, which was started by //Write
//Help [command]	: This message or more details on "command"
//Info	: Sends an info about this station
//Language <language>	: Changes the language of the messages
//MHeard [number]	: Shows a list of heard stations
//MHeard <call>	: Shows at which time <call> was finally heard
//Name <name>	: Stores your name if not yet known
//NEws	: Shows news (if there exist any)
//PRompt <ON/OFF>	: Switches on/off the Remote Prompt
//Quit	: Quits the contact
//Read <filename>	: Sends the file "filename"
//RPrg <filename>	: Sends the file "filename" in the AutoBin mode
//RTt <portnr>	: Shows the round trip time
//RUN <program>	: Runs an external program
//Usage [call]	: Channel state or a short info about "call"
//VERsion	: Shows the version number of software
//Write <filename>	: Stores the following text into the file "filename"
//WPrg <filename>	: Stores a file in the AutoBin mode

All commands must begin in the first row and must be completed with a <CR>. Type "//h h" for more details.

You can download Graphical Packet v1.50 from the ChowDaNet land-line BBS at (401) 331-2604. Look for file: GP150.ZIP

Or you can send me a S.A.S.E. (Diskette Mailer) with a formatted disk (any size) to:

CHRIS LANNAN - N1IPO
358 MARION RD.
MIDDLEBORO, MA 02346

If you do send me a disk, please fill it with your favorite shareware software to make the trip to me worthwhile.

CHRIS - N1IPO @ KAIRCI.RI.USA.NA

CURRENT W.A.P.R. MEMBERSHIP

The Following is a list of current members as of July 22, 1993.

If you don't find your name on this list, it's time to RENEW. If you should be on this list but can't find your name, drop me a message with your home BBS, or some other way I can reach you (your address, phone number, etc.)

In either case, please DO NOT delete this list if you don't find yourself listed and feel that you should already be on this list. Contact me instead. There are other members who may be checking this list for the same reason — to see if they are listed.

This membership list is regularly updated. If you recently sent in a membership application, but don't find yourself, wait for the next update. You can also contact me at the following packet address:

N9LLT @ WB9TYT.#/MKE.WI.USA.NOAM

Thanks,

Ted Heilmann - WAPR Treasurer

CALL	NAME	CITY
AA9AW	Walter Altus	Onalaska
K9EAG	Dennis Spranger	Wittenburg
K9CBU	James Lopas	Menasha
K9MLD	Joel Eschmann	Hartford
K9PIQ	Thomas Rehm	Mequon
K9RRS	Bruce Zabler	Racine
KA9EOK	Robert Martin	Park Falls
KA9JAC	Robert Gedeher	Neenah
KA9ZZK	Richard Koebernick	Tomah
KB9AMY	Jack Schluneger	Ashland
KB9DFE	Steven Miller	Spooner
KB9DMV	Timothy Mohr	Kenosha
KF9QD	Nels Friis	Milwaukee
N9GDY	Harry Hartmann	Oshkosh
N9GNQ	Charles Chenoweth	Milwaukee
N9IDH	Jim Clark	Waukesha
N9LLT	Ted Heilmann	Grafton
N9NIB	Duane Brophy	Sun Prairie
N9PTW	Richard Weinberger	N. Fond Du Lac
N9PMR	Richard Waedekin	Mequon
N9PPX	Chris Wineinger	West Allis
N9QXG	Terry Kortness	Eau Claire
N9SBA	Gary Bares	Fredonia
NX9K	Duane Brummel	Brooklyn
W0JDC	Aurthur Osborn	LaCrescent
W9BTN	Sandy Wirth	Cedarburg
W9HR	Emmet Algiers	Kenosha
W9IHW	Gustave Bonow	Port Edwards
W9LZQ	Kent Helman	Onalaska
W9MP	Michael Persson	Chetek
W9NJY	Andy Catanzaro	Wauwatosa
W9NNS	Fr. Bill Jablonske	Chippewa Falls
W9YCV	Lester Peterson	Greenfield
WA9JOB	Nels Harvey	Mequon
WA9JTX	James Opdyke	Beloit
WA9KFR	Walter Stasiowski	Port Washington
WA9TOZ	Charles Skooglund	Lodi
WB9GTX	Jack Douville	Sheboygan
WB9RED	Jim Broulette	Spooner
WB9RQR	Stan Kaplan	Mequon
WB9SMM	John Leekley	Menomonee Falls
WB9TYT	Dan Bolander	Milwaukee
WB9ZHQ	Alan Gudbaur	Racine
WB9ZRE	Steve Loeffler	Ripon

WAPR Treasurer's Report.

To the WAPR membership...

Subject : Treasurer's Report for Period of:
June, 13th. - July 14th. 1993.

Date 1993	Transaction Desc.	Amount	Balance
June 13th	Beginning Balance	\$497.69	\$497.69
July 9th	Deposit (Dues)	\$150.00	\$647.69
July 12th	Debit to BSSS	-\$136.00	\$511.69
July 12th	Debit (Postage)	-\$ 29.00	\$482.69
July 14th	Debit (Equip. Pur.)	-\$193.21	\$289.48
	Ending Balance		\$289.48

Respectfully submitted,
Ted Heilmann(Treasurer)

Yellow Thunder Amateur Radio Club

WB9FDZ (Original Club Call) • K9ODK (Robert L. Prine Memorial Call)



Raymond J. Matlosz, N9MLZ, Secretary

450 West 2nd Street • Reedsburg, WI 53959



The July 13, 1993 meeting of the Yellow Thunder Amateur Radio Club, Inc., was called to order at 7:36 p.m. by Bob Sauvan, WT9Q.

The minutes of the last meeting, as published in the BSSS, were accepted. Jim Decker, WB9UQT, gave the treasurers report.

Bob Sauvan announced that Mark and Paul Snyder both passed the exams for the Advanced license while Sara and Donna Snyder passed the exams for the codeless technician license. Congratulations!

Bill Klinkner, N9KXX, mentioned that there was a yellow lawn chair left at the field day site and asked the owner to please claim same by the next meeting. Bill can be contacted at 643-6453.

OLD BUSINESS: A possible club record was set during the last Field Day event with about 825 contacts having been made during the contest. Articles about the clubs participation in Field Day were published in local newspapers both before and after that weekend. A good time was had by all.

NEW BUSINESS: Art Kleefisch, W9WSS, reported that he was again the contact person for an annual coast to coast bicycle trek for 49 bicyclists peddling from Seattle to Asbury Park, New Jersey. Art reported that next year, the group plans on a different route, but will return to the Baraboo route the following year.

A fox hunt will be held prior to the August meeting and will start one half hour earlier than last year. The hunt will begin at 7:00 p.m. in the parking lot of the Baraboo Civic Center. Frequency is 146.52 and there may be two foxes this year. Antenna is limited to four elements. Refreshments will be served afterwards.

Buck night winner was the absent Jeremy Wight.

Meeting adjourned at 8:30 p.m.

Respectfully submitted,
Raymond J. Matlosz, N9MLZ

The next meeting will be held Wednesday, August 18, 1993 at the Baraboo Civic Center in room 14 following the Fox Hunt.

6 METER REPEATER ON LINE!

* SOUTHERN WISCONSIN REPEATER GROUP *

I would like to invite everyone to use and enjoy our new operational 6 Meter repeater!

After much research and planning, Pete, AA9AD and myself Jim, N9KAN have on the air what is hoped to be one of the finest 6 Meter repeaters in the country! I don't know of any running successfully in the state of Wisconsin!

The frequency for the 6 Meter repeater is 53.090 MHz output and 52.090 input. At this time, no PL is required for access.

The location is in southeastern Jefferson county, Wisconsin. The repeater should cover Madison and into Milwaukee. This repeater is linked via remote base to the Madison N9KAN/R 443.400 MHz repeater system full time.

The equipment consists of:

Repeater:....Motorola Micor at 100 Watts

Duplexer:....Sinclair 8 cavities

Controller:..Micro Computer Concepts 100

Antenna:.....Decibel Products dipole at 350 Ft

Remote Base:..Motorola Maxar 10 Watts, Yagi 35 ft

With the current configuration, we have a very wide area of coverage. The Madison 443.400 MHz repeater is linked to the 443.675 repeater near North Freedom. We should be able to cover North to Tomah, west to Mt Ida, south to Beloit, and east to Milwaukee!

On Sunday Nights at 9:00 PM, we provide a program called "This Week In Amateur Radio" which is an hour long program including News-line, YL Report, 160 meter Report, RAIN dialup

The following members and guests were present:

Raymond Matlosz, N9MLZ	Reedsburg
Bill Klinkner, N9KXX	Sauk City
Arthur Kleefisch, W9WSS	Baraboo
Thomas Harrison, N9PQJ	Reedsburg
Harry Mayland, K9EFT	Baraboo
Jim Decker, WB9UQT	Baraboo
Jim Paul, N9LKY	Merrimac
Ann Klinkner, N9PQL	Sauk City
Ken Johnson, K9DZG	Mazomanie
L.J. Hemmer, WB9TFJ	Baraboo
Rohbert Hemmer, N9LKY	Baraboo
Peter Sweeney, WD9JIB	Reedsburg
Robert Sauvan, WT9Q	Sauk City

Q: What do you get when you cross Le Iacocca with a bat.

A: Autoexec.bat

YELLOW THUNDER AMATEUR RADIO CLUB BEGINNER FOX HUNT (EASY LEVEL)

Wednesday, August 18, 1993

7:00 p.m. start

Baraboo Civic Center

back parking lot.

Talk in & Fox Hunt on 146.52 MHz.

Mobile rigs or handheld rigs.

Hand held antennas up to 4 elements.

Regular club meeting afterwards.

Refreshments will be provided.

Report, and other news programs.

If you have comments or suggestions, you may reach me at N9KAN-1 on 145.030 MHz, on the 443.400 MHz repeater. If you like what you hear, let me know. If you don't like something, let me know that too. (Donations are gladly accepted.) This system is open to all to use and enjoy. No fees or club affiliations are required.

73's Jim Kalrath, N9KAN



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(414) 762-3235 Extension 58
P.O. Box 102 South Milwaukee, WI 53172

Fox Cities Hamfest

November 7, 1993

Starlite Club, Hwy. 55 north of Kaukauna

HAMFEST INFO:

Dan Vanevenhoven, N9LVS
2410 E. Newberry Ct.
Appleton, WI 54915
414-739-5101

EXAM INFO:

Larry Siebers, KD9IA
414-788-3823

Lakeshore Hamfest

& Computer Swapfest

Manitowoc County Expo

Intersection of Hwys 42-151 and I-43 on Cty Highway R

For more information, call:

Ron, WS9X: 414-793-4733 (Nights)
Red, N9GHE: 414-684-9097

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15th Annual

CWRA SWAPFEST

UNIVERSITY CENTER, U.W. STEVENS POINT

Info: Art Wysocki, N9BCA 715-344-2984
3356 April Lane Stevens Point, WI 54481

EAU CLAIRE AMATEUR RADIO CLUB

SWAPFEST

Chippewa Falls Fairgrounds

Lis Searing, N9EQR 1129 McKinley Road
(715) 834-1303 Eau Claire, WI 54701

ROCKFORD HAMFEST AND COMPUTER SHOW

Sunday, April 17, 1994

Rockford Metro Centre

Write to: R.A.R.A., P.O. Box 6931, Rockford, IL 61125.
For more info, call 1-815-399-6995.

Ozaukee Radio Club 15TH ANNUAL RADIO AND COMPUTER SWAPFEST

8 a.m. to 1 p.m. • Circle B Recreation Center
Intersection of Highway 60 and County I
Exams by Badger Examiners, c/o Gary Sharbuno,
5119 W. Willow Rd., Brown Deer, WI 53223
Swapfest sponsored by Ozaukee Radio Club
11448 N. Laguna Drive • Mequon, WI 53092

Kettle Moraine Radio Amateurs

SWAPFEST

Sunday, October 10, 1993

Waukesha County Expo Center

Info: KMRA Swapfest P.O. Box 411
Waukesha, WI 53187-0411

Northern Wisconsin Radio Club

AUCTION

February 22, 1994 • 7:00 p.m.

American Legion Post 53 • 634 Water Street
Eau Claire, WI

CONTACT:

Steve Hart, KA9OMC
Route 1 Box 54

715-665-2374
Knapp, WI 54749

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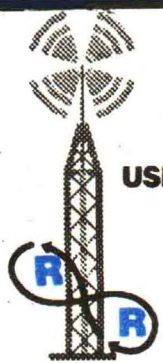


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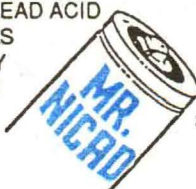
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